# A REVISION OF THE GENUS DERETRICHIA WEISE (COLEOPTERA : EUMOLPIDAE)



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#### SYNOPSIS

The genus *Deretrichia* Weise is confined to the islands of S.W. Melanesia from the Molucca Islands to the Solomon Islands and Australia. Nineteen species are redescribed and twenty-two new species described and a key to the forty-one species prepared. Lectotypes have been selected wherever appropriate. The limits of the genus are redefined and its relationships discussed. The terminology and homologies of the prothorax within the Eumolpidae are discussed with particular reference to *Deretrichia*.

#### INTRODUCTION

THE little-known Australasian genus Deretrichia was erected in 1912 for the reception of six species which were transferred from the genus Rhyparida (Baly, 1861), a very large genus found throughout S.E. Asia and the Pacific. In this paper 22 new species of Deretrichia are described and 13 further species are transferred from the genus Rhyparida, making a total of 41 species. Ultimately the genus may be much larger than it is now. Of the original six species in the genus, five were described by Baly (1867), and one by Jacoby (1894). The material examined came from the collections of the British Museum (Nat. Hist.) and from the museums of Berlin-Dahlem, Genoa, Cambridge Massachusetts, Leyden and Paris, and comprised captures made by A. R. Wallace and C. Allen (1854-63) throughout the south-western Pacific islands including north-eastern Dutch New Guinea, W. Doherty (1892) in Dutch New Guinea and Tenember, F. Muir (1907) in Larat, L. M. Albertis (1872-75) in Australia and New Guinea, L. E. Cheesman (1934-36) and J. Schreurs (1961) in Dutch New Guinea, Loria (1892-95) in Papua, O. Baccari (1873) in Amboina, and Woodford (1887) in the Solomon Islands. Unfortunately in almost every locality the number of specimens collected was very small. Moreover, subsequent collecting in the same areas has seldom yielded further specimens. Although the reason for this is not known, the scarcity may be due to the subsequent clearance of coastal belts of forest. Wallace himself (1869) commented on the

extreme paucity of insects in cleared areas and recently *Deretrichia* species have been collected only in regions, e.g. New Guinea, where large areas of the coastal forest belt have survived.

Because of the rarity of the species and the possibility that some may already have become extinct, it was decided to describe new species from unique specimens provided that these have good diagnostic characters.

#### DISTRIBUTION

The genus *Deretrichia* is found in Australia, New Guinea and the associated off-shore islands (Fig. 3). There are 20 species from the Molucca Islands, 15 from New Guinea including 10 from Dutch New Guinea and one species each from Timor, Larat, the Solomon Islands, Tasmania, Queensland and Borneo. No specimens have been found in Celebes in spite of the intensive collecting of A. R. Wallace and other later entomologists. The type locality of the species from Borneo, *D. laticollis* (Baly), is doubtful; the locality labels are not the originals and no other specimens have been found west of the Molucca Islands. Therefore *Deretrichia*, with the doubtful exception of *D. laticollis*, is found only on the eastern side of Wallace's line; that is in the Austro-Malayan region. In this it differs greatly from *Rhyparida*. The absence of species of *Deretrichia* in Celebes is unexpected, in view of the fact that numerous species have been collected from most of the larger islands between Celebes and New Guinea. The furthest east

			Batchian	Gilolo	Mysol	Ternate	Waigiou	Sula Isls.	Ceram	Amboina	Morty
D. alternata (Baly) .			×	×							
D. amboinensis*						•	•	•		×	
D. approximata (Baly)					×						
D. batchianica* .			×								
D. bipustulata (Baly)							×		•	•	
D. brunnea (Baly) .			×	•					•		
D. bryanti*				×		•	•	•	•		
D. flebilis*			•	•	· · ·	×	•	•	•		•
D. giloloensis*			•	×	•		•	•		•	
D. intermedia (Baly) .	•	•	•	•	•		×			•	-
D. nigra*	•	•	•	×	•	•		•	•	•	
D. pallidocaudata* .	•			•	•		•	•	×	•	•
D. rothschildi (Jacoby)			•	×	•	•	•	•	•		•
D. ruginotum*	•		×	×		•				•	•
D. semipunctata (Baly)			×	•			•		•	•	•
D. separata (Baly) .	•		×					•	•	•	•
D. sordida (Baly) .		- •	×	•	•	×		•			•
D. sulcicollis (Baly) .			•				•	×	•		•
D. tibialis (Baly) .			•	•	×	•	•	•	•		•
D. wallacei*				1.	×						
			· · c								

TABLE I. Distribution list of Deretrichia from the Molucca Islands

\*signifies a new species.

that *Deretrichia* has been found is Guadalcanal in the Solomon Islands. Although only two species have been found in Australia, one in Tasmania and the other in Queensland, it is expected that many more species will be found there. It is likely that some species previously described in the genus *Rhyparida* will be transferred to the genus *Deretrichia*.

## DERETRICHIA Weise

#### Deretrichia Weise, 1912: 425.

Type species : Deretrichia tibialis (Baly, 1867) : 183.

Body approximately twice as long as broad, shining, glabrous. *Head* exserted, antennae elongate and filiform. *Thorax* transverse, pronotum with distinct lateral margins, posterior angles distinct and each armed with a seta, anterior margin rounded and lacking angles and

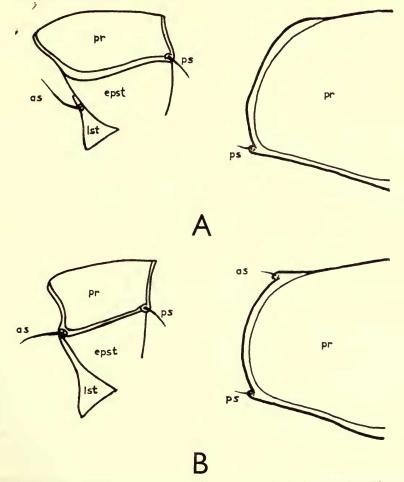


FIG. I. Prothorax, lateral and dorsal view. A, *Deretrichia* sp. B, *Rhyparida* sp. pr. pronotum; as. anterior seta; ps. posterior seta; epst. episternum; lst. lateral arms of sternum.

setae, prothoracic sternites with a long seta at the junction of the antero-dorsal corner of the isolated lateral prolongations of the prosternum and the antero-ventral corner of the episternum (Text-figs. I, 2); legs robust, femora usually with a tooth mid-way along the ventral surface, anterior tibiae often ridged and in the male, usually with a blunt tooth mid-way along the dorsal surface, middle and posterior tibiae strongly emarginate at the apex and usually ridged, tarsal claws bifid. *Scutellum* usually cordiform, approximately as broad as long. *Elytra* punctate-striate with the punctures obsolete at the apices.

The original diagnosis of the genus *Deretrichia* (Weise, 1912) was in the form of a short note stating the differentiating character : i.e. that in *Deretrichia* the anterior prothoracic setae are borne low down on the sides of the prothorax at the point where the corners of the episternum and the lateral prolongations of the sternum meet. In *Rhyparida* the setae are borne at the anterior corners of the pronotum. This has proved to be an excellent differentiating character (Text-fig. I, A, B).

In Nodostoma, the only other genus with which Deretrichia might be confused, the thorax is almost identical with that of *Rhyparida*, and the anterior setae are borne at the anterior corners of the pronotum. Moreover, the tarsal claws are invariably appendiculate and never bifid as in Deretrichia.

#### NOTES ON THE TERMS USED

There are many terms for the head sclerite lying immediately anterior to the Y sutures of the head and posterior to the basal articulation of the labrum. In the Eumolpidae this sclerite is single, apparently originating from the fusion of the frons with the clypeus. This fused sclerite is called the fronto-clypeus (Text-fig. 4, A). The anterior edge of the fronto-clypeus is emarginate. The degree of emargination is a constant specific character and is expressed as a fraction of the circumference of a circle. For example, in Text-fig. 4, B the emargination forms a semicircle ; in Text-fig. 4, A, one quarter the circumference of a circle.

The region of the head posterior to the Y sutures is termed the epicranium and it is bisected longitudinally by the epicranial suture. In *Deretrichia*, the epicranial suture never extends to the back of the head and in a few cases is not continuous with the Y sutures. The length of the epicranial suture is measured by referring to an imaginary line drawn across the back of the eyes. In Text-fig. 4, A the epicranial suture extends to a point on a level with the back of the eyes.

Unfortunately much confusion exists over the terminology of the prothorax of the Eumolpidae. In the more primitive genera of the family, e.g. *Chiloscena*, *Macrolema*, *Spilopyra*, there is a simple broad sternum with long lateral arms as in the Halticidae (Text-fig. 2, A, B). In the majority of genera, the prothoracic coxae are far forward, touching or almost touching the extreme anterior border of the sternum, thus isolating the lateral arms of the sternum (Text-fig. 2, C, D) which have frequently been misnamed, e.g. episternum (Jacoby, 1908), pro-epimeron (Bechyné, 1957 a, b). Weise (1912) rightly described these sclerites as lateral prolongations of the sternum.

The examination of material from many other genera of Eumolpidae has shown that the setae normally associated with the antero-lateral corners of the pronotum may be situated anywhere along the anterior border of the episternum. In the

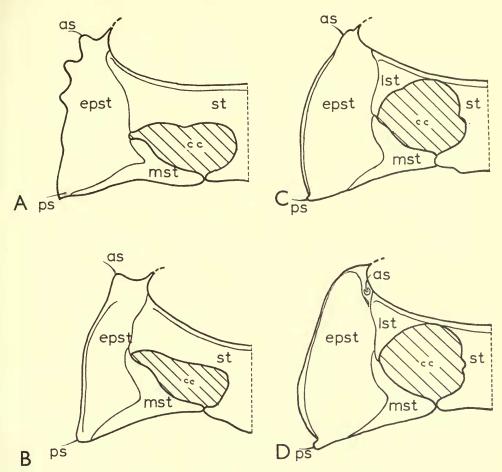
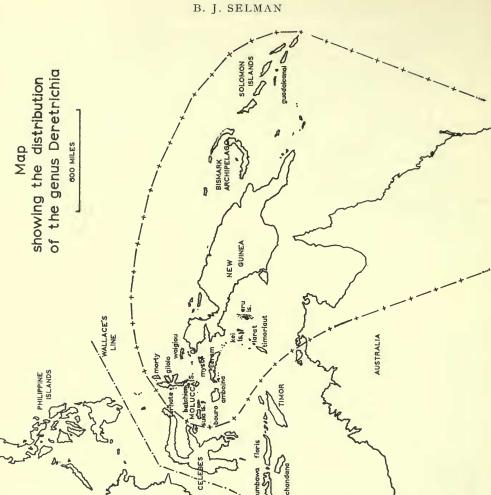


FIG. 2. Prothorax ventral view. A, *Cheiloscena* sp. B, *Spilopyra* sp. C, *Rhyparida* sp. D, *Deretrichia* sp. as. anterior seta ; ps. posterior seta ; st. sternum ; epst. episternum ; mst. mesosternum ; cc. coxal cavity ; lst. lateral arms of sternum.

genus *Deretrichia* the setae are in the most ventral position possible. The anterior border of the episternum, frequently thickened, may appear to be a prolongation of the dorso-anterior corner of the lateral arms of the prosternum. Indeed it has been claimed (Bechyné, 1957 a, b) that in some genera, e.g. *Typophorus*, the lateral arms (pro-epimeron of Bechyné) extend to the extreme latero-anterior surface of the pronotum where they form the base of the anterior setae. It is most unlikely that this is so. It seems that the anterior setae are always borne on the episternum and never on the lateral arms of the sternum nor on the pronotum.

The general surface of the insects varies from entirely smooth and shining to very finely but definitely granulated. This is a fine, more or less regular reticulation of impressed lines over the surface, a type of microsculpture referred to in this paper as shagreened.

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FIG. 3. Map showing the distribution of the genus *Deretrichia*. +---+ marks the boundary of the area within which *Deretrichia* species are to be found.

# KEY TO THE SPECIES OF Deretrichia

I	Thorax and elytra of different colours		2
_	Thorax and elytra of same general colour		3
2	Thorax black, elytra with coloured sheen		20
_	Not as above		4
3	At least some pronotal punctures elongated particularly along anterior and/or	lateral	l
	edges		5
	Pronotal punctures not elongate		6
4	Elytra unicolorous		7
-	Elytra with a pair of red spots		22
5	Interstices of pronotum raised		23
-	Interstices of pronotum not raised		. 8
	Longer than 5.5 mm.		31
-	Between 3.3 and 5.5 mm		9
	Shorter than 3·3 mm.	sp. n.	(p. 164)
7	Longer than 5 mm		. 38
	Shorter than 5 mm		39
8	Frontoclypeus sides approximately straight and diverging 8° or more fr	om the	е
	median line		12
_	Frontoclypeus sides parallel or diverging by less than 8°		. 13
9	Punctures on frontoclypeus large and distinct		. 10
_	Punctures on frontoclypeus not large and distinct		. 11
	4.5 mm. or more in length.		24
_	4.0 mm. or less in length		. 17
I	Shorter than 3.75 mm.		. 25
			. 18
-	Longer than 3.75 mm	sides	. 18
-			
2	Longer than 3.75 mm	sp. n.	(p. 165)
2	Longer than 3.75 mm	sp. n.	(p. 165)
2	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>Shorter than 4 mm.</li> <li>Longer than 4 mm.</li> </ul>	sp. n. sp. n.	(p. 165) (p. 165) . 32
	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>Shorter than 4 mm.</li> <li>Longer than 4 mm.</li></ul>	sp. n. sp. n.	(p. 165) (p. 165) . 32
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- - - - - - - - - - - - - - - - - - -	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>Shorter than 4 mm.</li> <li>Punctation of pronotum minute and slit-like</li> <li>Punctation of pronotum not minute and slit-like</li> <li>andannensis (Ja</li> <li>Punctation of pronotum not minute and slit-like</li> <li>Less than 5 mm. in length</li> <li>Less than 5 mm. in length</li> <li>Less than 5 mm. in length</li> <li>Longer than 4 mm.</li> </ul>	sp. n. sp. n. (Baly)	(p. 165) (p. 165) (p. 168) (p. 168) (p. 168) 15 16
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- - - - - - - - - - - - - - - - - - -	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>amboinensis</li> <li>Shorter than 4 mm.</li> <li>andannensis (Ja</li> <li>Punctation of pronotum minute and slit-like</li> <li>andannensis (Ja</li> <li>Punctation of pronotum not minute and slit-like</li> <li>f mm. or more in length</li> <li>f mm.</li> <li>f mm. in length</li> <li>f mm.</li> <li>f letticollis</li> <li>f letticolly pussion of frontocly peus forming less than one quarter circumference of the back of the eyes</li> <li>f Pronotum lightly punctured, interstices very shiny, elytra elongate papuensis</li> <li>f Pronotum heavily punctured, elytra not elongate</li> <li>f inormata (Ja</li> <li>f Epicranial suture extends to a point on a level with the back of the eyes</li> <li>f Pronotum strongly narrowing towards the base, Text-fig. 13J, elythetic for the back of the back of the sulcus deep</li> <li>f more strongly narrowing towards the base, Text-fig. 13J, elythetic for the back of the back of the back of the sulcus deep</li> </ul>	sp. n. sp. n. Baly)	(p. 165) (p. 165) (p. 168) (p. 168) (p. 168) (p. 168) (p. 168) (p. 169) (p. 169) (p. 169) (p. 170) (p. 170)
- 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>amboinensis</li> <li>Shorter than 4 mm.</li> <li>andannensis (Ja</li> <li>Punctation of pronotum minute and slit-like</li> <li>andannensis (Ja</li> <li>Punctation of pronotum not minute and slit-like</li> <li>f mm. or more in length</li> <li>f mm.</li> <li>less than 5 mm. in length</li> <li>in the level of the back of the eyes</li> <li>Epicranial suture extends back to a point on a level with the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Pronotum lightly punctured, interstices very shiny, elytra elongate papuensis</li> <li>Pronotum heavily punctured, elytra not elongate</li> <li>inornata (Ja</li> <li>Epicranial suture extends to a point on a level with the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Pronotum lightly punctured, elytra not elongate</li> <li>inornata (Ja</li> <li>Epicranial suture extends to a point on a level with the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture extends to a point on a level with the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture clearly extending</li></ul>	sp. n. sp. n. (Coby) Baly) he eyes a circle a circle sp. n. (Coby) he eyes umera (Baly) a with	(p. 165) (p. 165) (p. 168) (p. 168) (p. 168) (p. 168) (p. 168) (p. 169) (p. 169) (p. 169) (p. 170) (p. 170) (p. 34)
	Longer than 3.75 mm	sp. n. sp. n. (Coby) Baly) he eyes a circle a circle sp. n. (Coby) he eyes umera (Baly) a with	(p. 165) (p. 165) (p. 168) (p. 168) (p. 168) (p. 168) (p. 168) (p. 169) (p. 169) (p. 169) (p. 170) (p. 171)
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	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>amboinensis</li> <li>Shorter than 4 mm.</li> <li>Punctation of pronotum minute and slit-like</li> <li>andannensis (Ja</li> <li>Punctation of pronotum not minute and slit-like</li> <li>f mm. or more in length</li> <li>Less than 5 mm. in length</li> <li>Imagination of frontoclypeus forming less than one quarter circumference of Pronotum lightly punctured, interstices very shiny, elytra elongate papuensis</li> <li>Pronotum heavily punctured, elytra not elongate</li> <li>inornata (Ja</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture extends to a point on a level with the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the pronotum lightly punctured, elytra not elongate</li> <li>inornata (Ja</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the pronotum heavily punctured, elytra not elongate</li> <li>inornata (Ja</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the pronotum strongly narrowing towards the base, Text-fig. 12B, elytra with H sulcus deep</li> <li>inornation of strongly narrowing towards the base, Text-fig. 13J, elytr humeral sulcus shallow</li> <li>inforax as broad as or broader than elytra</li> <li>informatian suture extending to</li> <li>informatian elytra</li></ul>	sp. n. sp. n. (Coby) (Baly) he eyes a circle a circle sp. n. (Coby) he eyes umera (Baly) a with sp. n.	(p. 165) (p. 165) 32 (p. 168) 14 (p. 168) 15 16 16 16 16 2 37 (p. 169) (p. 169) (p. 169) 28 5 30 (p. 170) 1 34 (p. 171) 21
	<ul> <li>Longer than 3.75 mm.</li> <li>Longer than 7 mm. Pronotum approximately rectangular with undulating morokensis</li> <li>Longer than 4 mm. but less than 6 mm.</li> <li>amboinensis</li> <li>Shorter than 4 mm.</li> <li>Punctation of pronotum minute and slit-like</li> <li>andannensis (Ja</li> <li>Punctation of pronotum not minute and slit-like</li> <li>f mm. or more in length</li> <li>less than 5 mm. in length</li> <li>imagination of frontoclypeus forming less than one quarter circumference of Pronotum lightly punctured, interstices very shiny, elytra elongate papuensis</li> <li>Pronotum heavily punctured, elytra not elongate</li> <li>imornata (Ja</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture extends to a point on a level with the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the openation of frontoclypeus forming one quarter or more of circumference of Pronotum lightly punctured, elytra not elongate</li> <li>imornata (Ja</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the eyes</li> <li>Epicranial suture clearly extending to a point behind the level of the back of the sulcus deep</li> <li>imornata (Ja</li> <li>Pronotum strongly narrowing towards the base, Text-fig. 13J, elytra humeral sulcus shallow</li> <li>imornata a strongly narrowing towards the base, Text-fig. 13J, elytra humeral sulcus shallow</li> <li>imornata a strongly narrowing towards the base, Text-fig. 13J, elytra humeral sulcus shallow</li> <li>imornata a strongly narrowing towards the base, Text-fig. 13J, elytra humeral sulcus shallow</li> <li>imornata a strongly narrowing towards the base, Text-fig. 13J, elytra humeral sulcus shallow</li> <li>imornat a strongly narrowing towards the base, the sul</li></ul>	sp. n. sp. n. Baly) Baly) he eyes a circle a circle sp. n. coby) he eyes umera (Baly) a with sp. n. a point orming	(p. 165) (p. 165) 32 (p. 168) 14 (p. 168) 15 16 16 16 16 2 37 (p. 169) (p. 169) (p. 169) 28 5 30 (p. 170) 1 34 (p. 171) 21

B. J. SELMAN	В.	J.	S	E	L	M	A	N
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-	Frontoclypeus with sides approximately parallel, epicranial suture extending to a point level with the back of the eyes, emargination of frontoclypeus forming one
	quarter of a circle
22	Sheen on thorax purple, emargination of frontoclypeus forming one eighth of a circle
_	<b>paumomuensis</b> sp. n. (p. 172) Sheen on thorax green, emargination of frontoclypeus forming one fifth of a circle
	bipustulata (Baly) (p. 173)
23	Elytra and thorax flavous
	Elytra and thorax mid- to dark brown
	Elytra and thorax very dark brown or black sordida (Baly) (p. 175)
	Colour dark brown or black
_	Colour light brown or flavous doryensis sp. n. (p. 176)
25	Pronotum not strongly narrowed anteriorly, Text-fig. 12T, margins undulating
	timorensis (Jacoby) (p. 177)
-	Pronotum strongly narrowed anteriorly
26	Pronotum with a transverse chevron-shaped depression just posterior to the anterior
	border sulcicollis (Baly) (p. 177)
	Pronotum without transverse depression
27	Colour very dark brown, almost black, humeral sulcus well developed
	pinguis sp. n. (p. 179)
	Colour medium brown, humeral sulcus poorly developed <i>nigra</i> sp. n. (p. 179)
20	Pronotum strongly narrowed anteriorly, Text-fig. 13B, sutures between frontoclypeus and epicranium indistinct, colour light brown <b>batchianica</b> sp. n. (p. 180)
_	Pronotum only a little narrowed anteriorly, Text-fig. 13F, sutures between fronto-
_	clypeus and epicranium most distinct, colour dark brown
	pallidocaudata sp. n. (p. 180)
20	Epicranium chestnut red, frontoclypeus and pronotum dark brown
-9	approximata (Baly) (p. 182)
_	Epicranium dark brown as the pronotum or only a very little lighter
	plebeja (Jacoby) (p. 182)
30	Lateral margins of pronotum evenly rounded and strongly narrowed posteriorly with
	an indistinct, chevron-shaped depression just posterior to the anterior border,
	interstices strongly granulate, colour dark brown brunnea (Baly) (p. 183)
-	Pronotum strongly narrowed posteriorly from a point one third of the way from the
	base, without a chevron-shaped depression, interstices shining but only very
	slightly granulate, colour very dark brown, almost black . <b>plebeja</b> (Jacoby) (p. 182)
31	Pronotum strongly narrowed towards base, Text-fig. 13E, emargination of fronto-
	clypeus forming one fifth circumference of circle . <i>intermedia</i> (Baly) (p. 184)
	Pronotum not strongly narrowed towards the base, Text-fig. 12D
32	Shorter than 3 mm., pronotal punctures sparse and very elongate
	rothschildi (Jacoby) (p. 184)
	Longer than 3 mm
33	Pronotum highly convex, strongly narrowed at the base, colour light brown
	<i>australis</i> sp. n. (p. 186) Pronotum sides evenly curved but not narrowed at base, body very broad, colour
_	
2.4	dark brown
34	legs, head and apices of elytra light brown <b>bryanti</b> sp. n. (p. 187)
_	Scutellum only a little broader than long, pronotum Text-fig. 13J, colour black, legs,
	head and distal tips of elytra light brown <i>frontalis</i> (Baly) (p. 187)
35	Legs, head and body black, sides of frontoclypeus parallel . <i>laticollis</i> (Baly) (p. 168)
	Legs, head and body chestnut brown, pronotum and elytra with varying amounts
	of chestnut brown, sides of frontoclypeus diverging

- 36 Pronotum Text-fig. 13н, longer than 4 mm. . . . . . . . . wallacei sp. n. (р. 189)
- 37 Pronotum Text-fig. 13K, with a very shallow chevron-shaped depression just behind the anterior edge, basal area of elytra almost impunctate . *laevifrons* (Jacoby) (p. 190)
- Pronotum Text-fig. 13R, without a depression, basal area of elytra heavily punctate giloloensis sp. n. (p. 191)
- 38 Thorax chestnut red, elytra black, spermatheca Text-fig. 11D *alternata* (Baly) (p. 191) – Thorax brownish yellow, elytra dark brown, spermatheca Text-fig. 11E
  - *flebilis* sp. n. (p. 193)

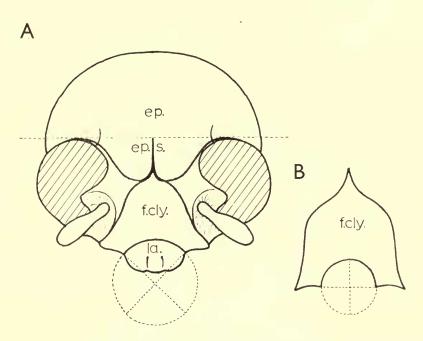


FIG. 4. Diagram of dorsal surface of head, showing the method of assessing the degree of emargination of the frontoclypeus. ep. epicranium ; ep.s. epicranial suture ; f.cly. frontoclypeus ; la. labrum. For further explanation see p. 5.

#### LOCATIONS AND DESIGNATION OF TYPES

Unless otherwise stated the holotypes are in the British Museum (Nat. Hist.). Baly and Jacoby, who described many of the species discussed in this paper, did not select holotypes. Therefore wherever possible lectotypes have been selected from the syntype series. All the lectotypes in this paper have been selected by the author. In a few species where it has not been possible to obtain fully authenticated type material, an asterisk is placed beside the name.

#### DESCRIPTIONS

# Deretrichia minuta sp. n.

# (Text-figs. 5, 10A, 12P)

 $\bigcirc$  Length 3.2 mm. Colour very dark brown, appendages lighter. Head shagreened, epicranium with many shallow indistinct punctures, an epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus vestigial, frontoclypeus with many shallow punctures only a little more distinct than those on the epicranium, sides approximately parallel, anterior edge emarginate, emargination forming one sixth of the circumference of a circle, antennae short, reaching one quarter of the way down the elytra, 2nd segment short, 1st longer than 2nd and approximately equal to 5th-11th segments, 4th longer than 1st, 3rd longer than 4th. Thorax (Text-fig. 12P)  $1.4 \times 0.9$  mm., pronotum relatively flat, narrowly margined, surface closely covered with small punctures, interstices obscurely shagreened ; femora with a ventral tooth one third from the distal tip, tibiae ridged. Scutellum cordiform with a flat base, impunctate, shagreened. Elytra  $\times 2.1$  as long as thorax, broader than thorax, humerus and thorax only very slightly raised, transverse depression very shallow but clearly discernible, humeral sulcus vestigial, punctures small, sparse and shallow, vestigial on the basal area and towards the apex. Genitalia, female, Text-fig. IOA.

Holotype : female, "TASMANIA, Somerset, i. 1875" (L. M. Albertis), Museo Civico, Genoa.

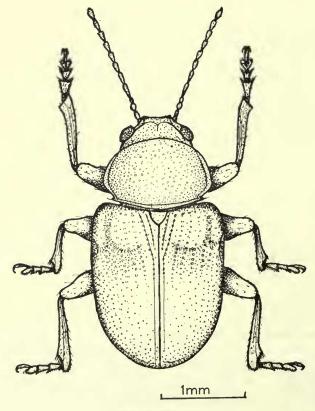


FIG. 5. Deretrichia minuta n. sp. 9.

This species and *D. australis* are the first species of *Deretrichia* described from Australia. *D. minuta* may be distinguished from *D. australis* by the elongated pronotal punctures, flatter pronotum and darker colour.

# Deretrichia morokensis sp. n. (Text-figs. 6, 10B, 12A)

Q Length 8.0 mm. Colour dark chestnut brown, thorax and head darker, antennae and labrum lighter. Head heavily shagreened, epicranium heavily punctured and strongly raised, the punctures large and deep, many with confluent depressions forming diagonally elongated channels extending from mid-anterior to latero-posterior, an epicranial suture extending to a point almost level with the back of the eyes, sutures between epicranium and frontoclypeus very prominent, frontoclypeus twice as wide as long at the anterior end, sides diverging very strongly anteriorly, anterior edge emarginate, emargination forming one quarter of the circumference of a circle, antennae reaching one third of the way down the elytra, 2nd segment short, 1st equal to 3rd and longer than 2nd, 4th-11th approximately equal and each longer than 1st. Thorax (Text-fig. 12A) 3.0 × 1.9 mm., pronotum much more rectangular than in most species, strongly margined, margin indented and buckled, punctures large and scattered, elongated along a postero-median to antero-lateral line, the mid-anterior edge ridged in a longitudinal direction, interstices smooth and glabrous; tibiae strongly ridged, femora very lightly shagreened but lacking the usual surface rugosities, 1st and 2nd tarsal segments with laterodistal points produced and very acute, claw segment equal in length to the other tarsal segments together. Scutellum cordiform, almost quadrate, glabrous with scattered small punctures. *Elytra*  $\times$  3·1 as long as thorax, basal area and humerus raised and bounded behind by a transverse depression, punctures very large and deep especially within the transverse depression, the humeral sulcus, and along the sides to the apex, slightly reduced on the basal area and the postero-median region, interstices glabrous with minute punctures, ridged immediately behind the humerus. Genitalia, female, Text-fig. 10B.

Holotype : female, "S.E. NEW GUINEA, Moroka, 1,300 m. vii–xi.1895 (Loria), Museo Civico, Genoa ".

This unique species is characterized by the very long elytra, a very rectangular pronotum with indented and buckled margins (Text-fig. 6, 12A), the large clytral punctures especially along the sides, and the lack of femoral spines.

# Deretrichia amboinensis sp. n.

(Text-figs. 7, 9A, 12C)

S Length 4.3 mm. Colour dark brown, with head, underside of thorax, abdomen, legs and apex of elytra paler, head appendages flavous. Head granulate, epicranium with a few minute shallow and very indistinct punctures, a short epicranial suture extending to a point just anterior to the back of the eyes, sutures between the frontoclypeus and epicranium very distinct, frontoclypeus with a few shallow indistinct punctures, sides diverging anteriorly, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching just over halfway down the elytra, 2nd segment short, 3rd longer than 2nd, 4th longer than 3rd, 1st approximately equal to 4th-11th. Thorax (Text-fig. 12c)  $1\cdot 1 \times 1\cdot 9$  mm., pronotum strongly margined, sides unevenly rounded, surface lightly shagreened, closely punctured with small but very distinct punctures, becoming vestigial around the circumference, elongate along the longitudinal axis; tibiae strongly ridged with a prominent blunt spine on the dorsal surface just over one third of the way from the base to the apex, hind and middle

tibiae very strongly emarginate, femora with a very small blunt tooth on the ventral surface. Scutellum cordiform with a flat base, glabrous with a few minute indistinct punctures. Elytra  $\times 2.5$  as long as thorax, broader than thorax, humerus and basal area prominently raised and bounded behind by a distinct transverse depression, humeral sulcus deep, punctures large and prominent within the transverse depression and humeral sulcus, reduced on the middle of the elytra and vestigial on the apical quarter and on the basal area and humerus. Genitalia, male, Text-fig. 9A.

Holotype : male, "AMBOINA, 1873 (O. Beccari), Museo Civico, Genoa".

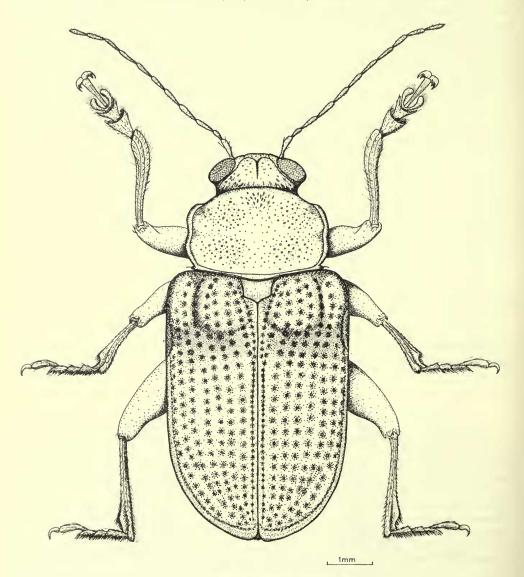


FIG. 6. Deretrichia morokensis sp. n. Q.

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This very distinctive species is long in proportion to its width, with long slender legs and antennae. The very distinctive aedeagus has a longitudinally-divided terminal lobe.

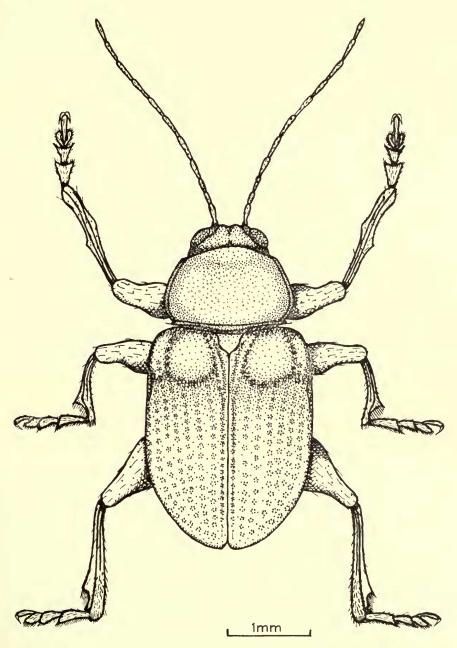


FIG. 7. Deretrichia amboinensis sp. n. J.

# Deretrichia andannensis (Jacoby) comb. n. (Text-figs. 9B, 10C, 12F)

#### Rhyparida and annensis Jacoby, 1894 : 280.

 $3^{\circ}$  Q Length 3.8 mm. Colour unicolorous testaceous, some specimens with darker areas on the elytra and thorax, mandibles dark brown, other head appendages fulvous. *Head* shagreened. epicranium very minutely and indistinctly punctured, a short distinct epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus present but not very distinct, frontoclypeus scarcely longer than broad, minutely but indistinctly punctured, sides diverging from posterior to anterior, anterior edge emarginate. emargination forming one quarter of the circumference of a circle, antennae reaching more than halfway down the elytra, and segment short, ist equal to and longer than and, 4th-iith equal and each longer than 3rd. Thorax (Text-fig. 12F) 1.9 × 1.0 mm., pronotum very distinctly punctured with small, slightly longitudinally-elongated punctures, interstices glabrous but shagreened, sides margined, rounded, converging from one third of the way from the base to the apex, a very shallow, indistinct, chevron-shaped, transverse depression just behind the anterior border; femora with a small tooth on the ventral surface one third of the way from the apex, tibiae ridged in the female, in the male thickened and more heavily ridged. Scutellum cordiform with a flat base and extended shoulders, shagreened, impunctate.  $Elytra \times 2.5$  as long as thorax, broader than thorax, glabrous, the basal area raised and bounded by a transverse depression, humeri prominent, punctures large and distinct especially within the transverse depression and humeral sulcus, reduced on the basal area and becoming vestigial on the posterior half, the apex impunctate. Genitalia, female, Text-fig. 10C ; male, Text-fig. 9B.

Lectotype : female, "New GUINEA, Andai, 1892 (W. Doherty)". By present selection.

Other material : two males and four females, NEW GUINEA, "Dory", iv-vi.1858 (A. R. Wallace), of which one female and one male are in the British Museum (Nat. Hist.), and the remainder in the Manchester Museum.

This species is similar to *D. pinguis*, and may be distinguished by the slit-like pronotal punctures and dull pronotum.

# Deretrichia laticollis (Baly) comb. n. (Text-fig. 12D)

#### Rhyparida laticollis Baly, 1867 : 182.

 $\mathcal{Q}$  Length 6.3 mm. Colour black, legs very dark brown, almost black. Head heavily shagreened, epicranium heavily and distinctly punctate, an epicranial suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus broader than long, deeply and closely punctate, sides diverging slightly anteriorly, anterior edge emarginate, emargination forming three sixteenths of the circumference of a circle, antennae with 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd, 4th and 5th approximately equal and longer than 3rd, segments 6–11 missing. Thorax (Text-fig. 12D)  $3\cdot 2 \times 1\cdot 8$  mm., pronotum heavily punctate, interstices glabrous and minutely shagreened, sides smoothly rounded, broadly margined ; legs stout, tibiae ridged, femora with a small blunt tooth on the ventral surface one quarter from the distal end. Scutellum cordiform with a flat base, glabrous with a few minute scattered punctures. Elytra  $\times 2\cdot 22$  as long as thorax, just broader than thorax, heavily punctate, interstices minutely punctured, slightly but distinctly convex on the anterior half, punctures deep within the transverse groove and humeral sulcus, less so on the basal area and posterior half, becoming vestigial towards the apex, basal area and humeri raised, transverse depression and humeral sulci distinct. Genitalia missing. Lectotype : female, "BORNEO", date and collector unknown, from the Baly collection. By present selection.

This is the only species of *Deretrichia* so far described from Borneo. The lectotype bears only Baly labels although it was included in the description of the material collected by A. R. Wallace in Melanesia. There is some doubt about the validity of the type locality. *D. laticollis* is similar to *D. plebeja*, but is much larger with larger punctures on the pronotum and the elytra.

# Deretrichia papuensis sp. n. (Text-fig. 12K)

 $\bigcirc$  Length 4.0 mm. Colour unicolorous light brown, punctures on elytra dark brown. Head shagreened, with a few minute, indistinct punctures, a deep epicranial suture extending back to a point on a level with the back of the eyes, sutures between frontoclypeus and epicranium very distinct, frontoclypeus heavily punctate, sides almost parallel, anterior edge emarginate, emargination forming one quarter of the circumference of a circle, antennae reaching halfway down elytra, segments 6-11 broader than 1-5, 2nd short, 1st equal to 3rd and longer than 2nd, 4th-11th approximately equal and just longer than 3rd. Thorax (Text-fig. 12K) 1·1 × 2·1mm, sides smoothly rounded with a broad margin, surface smooth and glabrous with numerous small, distinct punctures ; femora with a blunt tooth on the mid-ventral surface, tibiae ridged, male unknown. Scutellum wider than long, semi-ovate, glabrous, smooth and impunctate. Elytra × 2·6 as long as thorax, just broader than thorax, elongate, basal area and humerus only slightly raised, transverse depression present but ill-defined and very shallow, punctation bold within the transverse depression, reduced on the basal area and vestigial at the apex, interstices smooth and glabrous. Genitalia missing.

Holotype : female, "PAPUA, Mafulu, 4,000 ft., Jan. 1934 (L. E. Cheesman)".

This species is unique in the degree of elytral elongation and in the slight flattening of the elytra and abdomen.

# Deretrichia inornata (Jacoby), comb. n. (Text-figs. 10L, 12R)

#### Q Rhyparida inornata Jacoby, 1894 : 278.

Length 3.1-3.8 mm. Colour mid-brown, some specimens with darker patches on the head and pronotum. Head shagreened, epicranium with numerous distinct but shallow punctures, an epicranial suture extending back to a point just behind the level of the back of the eyes, sutures between the epicranium and frontoclypeus distinct, frontoclypeus heavily punctate, sides approximately parallel, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching halfway down the elytra, 1st segment approximatley equal to each of segments 5th-11th, and shorter, 3rd longer than and but shorter than 1st, 4th longer than 1st. Thorax (Text-fig. 12R)  $1 \cdot 1 \times 1 \cdot 9$  to  $0 \cdot 9 \times 1 \cdot 6$  mm., pronotum glabrous, very heavily punctate, interstices very lightly shagreened, sides smoothly rounded with no suggestion of an angle, margin narrow ; tibiae of female ridged, femora with a minute blunt tooth on the ventral surface one quarter of the way from the distal end, male unknown. Scutellum cordiform, glabrous, very lightly shagreened with numerous small punctures mostly on the anterior half. *Elytra*  $\times 2.4$  as long as pronotum, humerus and basal area slightly raised and bounded below by a shallow broad transverse depression, punctures shallow but prominent on the posterior half of the elytra, deepest within the transverse depression and humeral sulcus, becoming indistinct towards the apex, interstices smooth and glabrous. Genitalia, female, Text-fig. 10L.

Lectotype : female, "TENIMBER, vi-vii. 1892 (W. Doherty)", in the Bowditch collection of the Museum of Comparative Zoology, Harvard. By present selection. This is the left hand specimen of two females mounted on the same card " (Type No. 9817)".

Paralectotype : female, data as above. By present selection. This is the right hand specimen of the two females mounted on the same card " (Type No. 9817)".

Other specimens : two females, "LARAT, 1907 (F. Muir)", in the British Museum (Nat. Hist.).

This very distinct species is closest to *D. pinguis*, and *D. timorensis*. It is readily distinguishable from *D. pinguis* by the much heavier punctation of the pronotum, elytra, scutellum and frontoclypeus ; and from *D. timorensis* by the much heavier punctation of the frontoclypeus and the more evenly rounded shape of the pronotum.

#### Deretrichia tibialis (Baly)\*

(Text-figs. 9C, 11F, 12B)

#### Rhyparida tibialis Baly, 1867 : 183. Deretrichia tibialis (Baly) Weise, 1912 : 425.

 $3^\circ$  Q Length 4.25-4.5 mm. Colour variable, some specimens reddish-brown, legs and epipleura lighter and more flavous, head appendages flavous; other specimens with thorax very dark brown, with the anterior edge light brown, epicranium reddish-brown, frontoclypeus reddishbrown or dark brown, elytra dark brown with apex and anterior edge pale, scutellum also pale, abdomen dark brown, legs and head appendages as in the type ; many intermediate specimens, but all having a reddish-brown epicranium. Head shagreened, epicranium with small, indistinct punctures, a short epicranial suture extending to a point just behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus as wide as long, distinctly punctate, interstices shagreened, sides approximately parallel, anterior edge concave and emarginate, emargination forming one third of the circumference of a circle, antennae reaching two thirds of the way down the elytra, 2nd segment short, 1st equal to 3rd and longer than 2nd, 4th longer than 3rd, 5th-11th approximately equal but each shorter than 4th. Thorax (Text-fig. 12B) of male  $1.3 \times 2.35$ , of female  $1.2 \times 2.25$  mm, pronotum heavily margined, sides smoothly curved, strongly convex both longitudinally and transversely, lightly shagreened with numerous distinct, longitudinally elongated punctures, median anterior edge slightly raised giving a hooded effect; tibiae ridged, male with a conspicuous blunt tooth on the dorsal surface one third of the way from the proximal end, and segment of the tarsi with latero-distal points produced, those of the 1st segment much less so, femora with a well-developed blunt tooth on the ventral surface three-eighths of the distance from the distal end, less welldeveloped on the meso- and meta-thoracic legs. Scutellum cordiform with a flat base, glabrous, lightly shagreened, impunctate. Elytra of male approximately  $\times 2.18$ , and of female  $\times 2.36$  as long as thorax, those of male equal in width to thorax, those of female wider than thorax, basal area little raised, transverse depression and humeral sulcus vestigial, humeri prominent, punctation large and prominent, interstices smooth, glabrous and very slightly raised. Genitalia, male Text-fig. 9C ; female Text-fig. 11F.

One male and three females, "MYSOL", 1860 (A. R. Wallace), in the British Museum (Nat. Hist.).

This species is the type of the genus. Unfortunately the present author has been unable to find the type of the species. However, one specimen of the series in the British Museum bears a determination label in Baly's handwriting, and a Wallace locality label. Moreover it fits Baly's description of the species in all respects. It is this specimen, a male, that is redescribed here.

This species is similar to *D. bryanti* and *D. frontalis*, but has a deep humeral sulcus and a pronotum which narrows strongly towards the base (Text-fig. 12B).

#### Deretrichia nigronotata sp. n.

(Text-figs. 9D, 10D, 12I)

& Length 4.2 mm. Colour black, elytra with a blue sheen, antennae flavous, head and legs black tinged with varying amounts of brown particularly on the tarsi, scutellum amber. Head shagreened, epicranium with small, indistinct punctures, longitudinally rugose at the base, an epicranial suture extending back to a point well behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus distinctly punctate, as broad as long, sides diverging slightly from posterior to anterior, anterior edge emarginate, emargination forming one third of the circumference of a circle, antennae reaching halfway down the elytra, and segment short, 1st longer than and, 3rd longer than 1st, 4th-11th approximately equal and each longer than 3rd. Thorax (Text-fig. 121) of male  $1.4 \times 2.3$  mm., of female  $1.25 \times 2.3$  mm., marginate, sides evenly rounded, very lightly shagreened, distinctly punctate except at the extreme anterior edge where the punctures are vestigial; tibiae ridged, prothoracic tibiae of male with a large blunt spine on the dorsal surface one third of the way from the proximal end, spines on the ventral surface of the femora extremely small. Scutellum cordiform with a flat base, as wide as long, very lightly shagreened with small, indistinct punctures. Elytra of male  $\times 2 \cdot 2$ , of female  $\times 2 \cdot 3$  as long as thorax, as broad as thorax, humeri and basilar space raised, humeral sulcus and transverse depression shallow, punctate-striate, punctures deep within the transverse depression and humeral sulcus, shallow on the basal area, and vestigial at the apices, interstices slightly convex. Genitalia, male, Text-fig. 9D; female, Text-fig. 10D.

Holotype : male, "NEW GUINEA, Munika Bay", date unknown "(F. R. Wollaston)", presented to the British Museum (Nat. Hist.) 1911. Paratype : male, data as above.

This species together with *D. livida* and *D. viridis* forms a group characterized by the coloured sheen of the elytra. *D. nigronotata* is smaller than the other two species and has a pronotum as broad as, or broader than the elytra. Both the other species have a pronotum much narrower than the elytra.

## Deretrichia livida sp. n.

(Text-figs. 9E, 10E, 12G)

 $3^{\circ}$  Length 5·3-5·8 mm. Colour black, elytra with a blue-green sheen, scutellum very dark brown or black, antennae with segments 1-3 brown, and 4-11 black with a brown apex, labrum brown. Head with epicranium lightly shagreened with a few minute punctures, lightly ridged longitudinally along the base, an epicranial suture extending to well behind a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus very lightly shagreened, with large shallow punctures most numerous anteriorly, broader at the base than long, sides very strongly diverging anteriorly, anterior edge emarginate, emargination forming one sixth of the circumference of a circle, antennae reaching one third of the way down the elytra, 2nd segment shorter than 3rd, 3rd shorter than 1st, 5th-11th approximately equal in length and each longer than 1st, 4th longer than 5th. Thorax (Text-fig. 12G) of male 2·4 × 1·5 mm., of female 2·6 × 1·5 mm., pronotum marginate, shagreened with

numerous small punctures, sides strongly converging from one third of the way from the base towards the apex; femora with many blunt spines, a larger spine on the ventral surface, tibiae heavily ridged, with a dorsal spine on the male pro-thoracic tibiae. Scutellum lightly shagreened, impunctate, cordiform with a flat base. Elytra of male  $\times 2.3$ , of female  $\times 2.6$  as long as pronotum, humeri and basal area raised and bounded behind by a shallow, transverse depression, punctures large and deep in the transverse depression and humeral sulcus reduced on the basal area and humeri and vestigial towards the apices, interstices smooth and glabrous. Genitalia, male, Text-fig. 9E; female, Text-fig. IOE.

Holotype : female, "DUTCH NEW GUINEA, Cyclops Mts. 3,500 ft. iii. 1936 (L. E. Cheesman)".

Paratypes : one male and one female, "GERMAN NEW GUINEA", date unknown " (Bennigsen)", Deutsche Entomologisches Institut, Berlin-Dahlem.

This species is similar to D. *nigronotata* but has a pronotum much less broad than the elytra. It is also similar to D. *viridis* but has a much longer epicranial suture, a more granulate pronotum, more heavily ridged tibiae and a blue-green sheen and very dark brown scutellum.

# Deretrichia viridis sp. n.

(Text-figs. IOF, I2M)

Q Length 5.8 mm. Colour black, elytra with a green sheen, antennae light brown, 6 distal segments tinged with black, scutellum amber. Head shagreened, epicranium with many small indistinct punctures, longitudinally ridged at the base, an epicranial suture extending to a point just anterior to the back of the eyes, sutures between epicranium and frontoclypeus discernible but indistinct, frontoclypeus with small yet clearly-defined punctures, sides approximately parallel, anterior edge emarginate, emargination forming one quarter of the circumference of a circle, antennae short, with 6 distal segments broadened and more heavily setate than the proximal 4, and reaching one quarter of the way down the elytra, 2nd segment short, 3rd longer than 2nd and equal to 1st and 5th-11th, 4th longer than 3rd. Thorax (Text-fig. 12M) 1.4 × 2.7 mm., pronotum glabrous, minutely shagreened with numerous small, very distinct punctures, sides margined, converging from one third of the way from the base towards the apex, but not in a smooth curve ; legs, tarsi ridged, femora with a small well-formed spine on the ventral surface two fifths of the distance from apex to base. Scutellum broader than long, cordiform with a flat base, glabrous, very lightly shagreened, impunctate. Elytra  $\times 2.8$ as long as thorax, broader than thorax, basal area and humerus raised, humeral sulcus and transverse depression deep and clearly defined, punctures large and deep in the transverse depression, reduced on basal area, humeri, and towards the apices ; interstices smooth and glabrous with a few minute punctures. Genitalia, female, Text-fig. 10F.

Holotype : female, "PAPUA, Mafulu 4,000 ft., i. 1934 (L. E. Cheesman)".

This species is similar to D. *nigronotata* but has a pronotum narrower than the elytra. It is also similar to D. *livida* but has a shorter epicranial suture, a less granulate pronotum, and less heavily ridged tibiae. It has a green sheen and an amber-coloured scutellum. The male is unknown.

# Deretrichia paumomuensis sp. n. (Text-figs. 10G, 12E)

 $\bigcirc$  Length 4.5 mm. Colour black with a red sheen, scutellum amber, elytra with a single red spot one quarter of the way from the base and extending almost to the sides but not to the

suture. *Head* very lightly shagreened, epicranium with a few minute punctures, a sharplydefined epicranial suture extending to a point well behind the level of the back of the eyes, sutures between epicranium and frontoclypeus vestigial, frontoclypeus with well-defined, evenly-spaced small punctures, sides approximately parallel, anterior edge emarginate, emargination forming one eighth of the circumference of a circle, antennae short, reaching one third of the way down the elytra, terminal segments broad, 2nd segment short, 1st and 3rd equal in length and longer than 2nd, 4th-11th approximately equal and each longer than 3rd. *Thorax* (Text-fig. 12E)  $1\cdot 2 \times 2\cdot 2$  mm., sides rounded, margined, surface very lightly granulose with small widely-spaced punctures ; tibiae of female ridged, femora with a minute spine on the ventral surface one quarter of the way from the distal end. *Scutellum* cordiform with a flat base, very lightly shagreened with minute punctation. *Elytra*  $\times 2\cdot 4$  as long as pronotum, just broader than thorax, humeri a little raised, basal area flat, humeral sulcus very shallow, no transverse depression, punctures large and well-defined, becoming indistinct near the apex, interstices slightly raised, glabrous, with scattered minute secondary punctures. Genitalia, female, Text-fig. 10G.

Holotype : female, "S.E. NEW GUINEA, Paumomu river, ix-xii. 1892 (Loria), ex Museo Civico, Genoa," British Museum (Nat. Hist.) No. 1909–28a, purchased from O. E. Janson, selected from the Jacoby collection.

This species is superficially similar to *D. bipustulata*, but it is larger, has a red sheen, and is much wider especially at the thorax. The pronotum has the intervals lightly granulate and the elytra have the intervals glabrous with minute secondary punctures.

#### Deretrichia bipustulata (Baly). comb. n.

(Text-figs. 10H, 12S)

#### Rhyparida bipustulata Baly, 1867 : 199.

 $\bigcirc$  Length 4.2 mm. Colour black with a blue sheen, a single red spot one third of the way down each elytron, a deep amber scutellum, and a pair of diffuse red spots on the frons, maxillary palpi and bases of antennae flavous. Head very lightly shagreened, epicranium impunctate with a short epicranial suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus distinct, frontoclypeus with rounded sides, anterior border emarginate, emargination forming one fifth of the circumference of a circle, antennae extending to one third of the way down the elytra, 2nd segment short, 1st equal to 3rd but longer than 2nd, 4th-11th approximately equal but each longer than 1st. Thorax (Text-fig. 12S)  $2\cdot0 \times 1\cdot1$  mm., pronotum with sides evenly rounded, lightly margined, lightly shagreened, minutely but distinctly punctate ; tibiae ridged, femora with a minute tooth on the ventral surface one quarter of the way from the distal end. Scutellum cordiform, impunctate, lightly shagreened. Elytra  $\times 2\cdot 2$  as long as thorax, broader than thorax, without transverse depression, basal area not raised, humeri only slightly raised, punctures continuing to the apex with little reduction in size, interstices smooth and glabrous, faintly convex anteriorly. Genitalia, female, Text-fig. IOH.

Lectotype : female, "WAIGIOU", vi–vii . 1860 (A. R. Wallace), from the Baly collection. By present selection.

This species and *D. paumomuensis* are unique in the genus. The red-spotted elytra, the general lightness of the punctation and the poor definition of the head sutures readily differentiate them from all other species. *D. bipustulata* is shorter than *D. paumomuensis* and is much narrower, especially at the thorax. It has a blue sheen and a pronotum with intervals lightly shagreened, and the elytral intervals are glabrous without secondary punctures.

#### Deretrichia guadalcanalensis sp. n.

(Text-figs. 8, 101, 120)

Q Length 3.2 mm. Colour unicolorous flavous. Head with epicranium glabrous with a few indistinct punctures, a very indistinct epicranial suture extending from a point immediately in front of the back of the eyes to a point just behind the back of the eyes, no sutures between epicranium and frontoclypeus, frontoclypeus glabrous with a circlet of large punctures flanked by a pair on either side near the base of the antennae, sides strongly diverging from base to apex, anterior edge emarginate, emargination forming one eighth of the circumference of a circle, antennae with segments 3-11 missing. Thorax (Text-fig. 120) 0.9×1.5 mm., sides rounded, strongly converging from one third of the way from the base towards the apex. strongly margined especially at the widest point of the thorax, very heavily punctate, punctures lying between longitudinally-elongated rugosities, most developed laterally, rugosities and punctures vestigial along the mid-line and extreme anterior border ; legs with toothed femora and ribbed tibiae. Scutellum cordiform, wider than long, with a flat base, impunctate, glabrous. Elytra  $\times 2.4$  as long as thorax, basal area and humeri slightly raised and bounded behind by a shallow transverse depression, punctures lying along longitudinal grooves and most heavily impressed within the transverse depression and vestigial at the apex, interstices convex in the basal area, glabrous. Genitalia, female, Text-fig. 101.

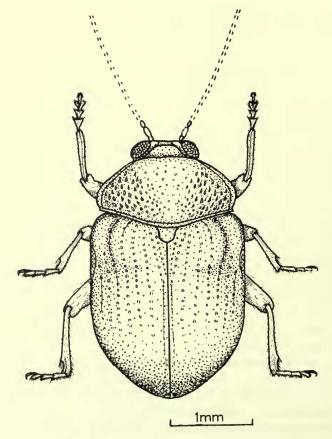


FIG. 8. Deretrichia guadalcanalensis sp. n. Q.

Holotype : female, SOLOMON ISLANDS, "Guadalcanal, iii.1887 (C. M. Woodford)".

This species, together with *D. ruginotum* and *D. sordida* forms a distinct group characterized by an extremely rugose thorax. It is smaller than *D. ruginotum* and *D. sordida*, the pronotum is more rugose, and the elytra more elongate and heavily punctured. *D. guadalcanalensis* is very light brown, the pronotum narrows strongly anteriorly and the frontoclypeus has a very few, very large punctures. The male is unknown.

# Deretrichia ruginotum sp. n.

(Text-figs. 9F, 10J, 12J)

 $3^{\circ}$  Colour unicolorous dark brown. Head shagreened, epicranium with indistinct punctation, a distinct epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus about as long as broad, sides approximately parallel, anterior edge emarginate, emargination forming five sixteenths of the circumference of a circle, deeply punctate, interstices forming longitudinal ridges, antennae reaching just over halfway down the elytra, and segment short, ist equal to 3rd and longer than 2nd, 4th-11th approximately equal and each longer than 3rd. Thorax (Text-fig. 12]) 1.25 × 2.1 mm., pronotum heavily punctate with longitudinal rugosities, greatest at the sides, least along the mid-line, interstices shagreened, marginate; tibiae of male ridged with a large blunt tooth one third of the way from the proximal end on the dorsal surface, femora with a small tooth on the ventral surface, tibiae of female without teeth. Scutellum cordiform with a flat base, shagreened, impunctate. Elytra × 2.0 as long as thorax, just wider than thorax, basal area and humerus slightly raised, humeral sulcus and transverse depression very shallow, punctures large and distinct especially within the humeral sulcus, reduced towards the apex, interstices slightly raised. Genitalia, male, Text-fig. 9F; female, Text-fig. 10J.

Holotype : male, "GILOLO", i-iv.1858 (A. R. Wallace), No. 28802 from the Fry collection, British Museum (Nat. Hist.), No. 1905. 100.

Paratypes : male, "GILOLO", and male and female, "BATCHIAN", ix.1858iv.1859 (A. R. Wallace). The Batchian male is in the Manchester Museum.

This species belongs to the distinct group characterized by an extremely rugose pronotum. It may be distinguished from D. sordida by the more posteriorly narrowed and ridged pronotum, and the lighter colour; from D. guadalcanalensis by the less rugose and less anteriorly-narrowed pronotum, the densely punctured frontoclypeus and the darker colour.

# Deretrichia sordida (Baly) comb. n.\*

(Text-figs. IOK, I2H)

Rhyparida sordida Baly, 1864 : 10. Rhyparida sordida Baly, 1867 : 182.

 $\bigcirc$  Length 4.5 mm. Colour dark brown, almost black, with scutellum, head, middle of the anterior border of the thorax, and all appendages rufo-piceous. Head heavily shagreened, epicranium with faint, scattered punctures, a short shallow suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus visible but not distinct, frontoclypeus as broad as long, sides diverging very slightly from posterior to anterior, anterior edge emarginate, emargination forming one quarter of the circumference of a circle, surface impressed with many large deep punctures, antennae reaching halfway down the elytra,

2nd segment short, 1st longer than 2nd, 3rd longer than 1st, 4th longer than 3rd, 5th-11th each approximately equal to 3rd. Thorax (Text-fig. 12H)  $2 \cdot 2 \times 1 \cdot 1$  mm., sides margined and evenly rounded, surface very closely and deeply punctured, each puncture elongated, deepest at the posterior end and partially confluent with the adjacent punctures along an antero-posterior line forming rough ridges, interstices thickened and heavily shagreened; tibiae lightly ridged, femora without a tooth on the ventral surface. Scutellum cordiform with a flat base, impunctate, shagreened. Elytra  $\times 2 \cdot 8$  as long as and broader than thorax, basal area and humeri slightly raised, transverse depression and humeral sulcus shallow but distinct, punctures deep and distinct especially within the transverse depression and humeral sulci, becoming vestigial towards the apex, interstices glabrous, slightly but distinctly convex on the basal area. Genitalia, female, Text-fig. 10K.

A female ," BATCHIAN ", 1859 (A. R. Wallace), from the Baly collection, is in the British Museum (Nat. Hist.). This specimen is from one of the two type localities. It is almost certainly a syntype. It is this specimen which is redescribed. The other type locality is Ternate. A second female, "TERNATE", 1858 (A. R. Wallace), is in the Manchester Museum.

This species belongs to the group characterized by an extremely rugose pronotum. It may be distinguished from *D. ruginotum* by the more quadrate and less ridged and posteriorly-constricted pronotum, and the darker colour; from *D. guadalcanalensis* by the less rugose and less anteriorly narrowed pronotum, the more densely punctured frontoclypeus and darker colour.

# Deretrichia doryensis sp. n. (Text-figs. 96, 12L)

 $3^{\circ}$  Q Length 5.0-5.5 mm. Colour flavous, head and thorax fuscous. Head shagreened, epicranium with many very small, obscure, shallow punctures, a well-defined epicranial suture extending back to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus as long as broad with many large punctures, punctures closest on the posterior and anterior margins, sides almost parallel, anterior edge emarginate, emargination forming one third of the circumference of a circle, antennae reaching one third of the way down the elytra, and segment short, and longer than and equal to 1st, 5th-11th approximately equal and each longer than 3rd, 4th longer than 5th. Thorax (Text-fig. 12L) 1.3 × 2.4 mm., strongly margined, sides rounded, surface glabrous with many large punctures; legs stout, tibiae ridged with a blunt spine one third of the way from the base, mesothoracic tibiae shorter and more massive than those of the metathorax, femora with a small spine on the ventral surface one quarter of the way from the base. Scutellum cordiform with a flat base, lightly shagreened, impunctate.  $Elytra \times 2.5$  as long as thorax, just broader than thorax, basal area and humerus hardly raised, transverse depression and humeral sulcus shallow and ill-defined, boldly punctured over the entire surface, sutural striae grooved for apical three fourths of elytral length, interstices glabrous and slightly raised on the basal area. Genitalia, male, Text-fig. 9G.

Holotype : male, NEW GUINEA, "Dory", collector and date unknown.

Paratype : female, data as above.

Both the holotype and paratype were purchased by the British Museum (Nat. Hist.) 1858–1859 from Stevens.

This is the largest member of the group of almost unicolorous, light brown species mostly found on the mainland of New Guinea. *D. doryensis* is similar to *D. plebeja* and *D. approximata*, but it is larger, the frontoclypeus has almost parallel sides, the sutures between the frontoclypeus and the epicranium are distinct, and the epicranial suture extends as far as the back of the eyes.

# Deretrichia timorensis (Jacoby) comb. n. (Text-figs. 9H, 12T)

#### Rhyparida timorensis, Jacoby, 1894: 278.

& Length 3:5-3:7 mm. Colour fulvous. Head shagreened, epicranium with vestigial punctures, an epicranial suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus with numerous large, shallow punctures, sides very slightly diverging anteriorly, anterior edge emarginate, emargination forming three eighths of the circumference of a circle, antennae extending to one third of the way down the elytra, and segment short and equal to 3rd, 1st and 4th-11th approximately equal and each longer than 2nd. Thorax (Text-fig. 12T) 1.0-1.1 × 1.6-1.7 mm., pronotum much more rectangular in shape than in most species, marginate, margins indented and buckled, closely and evenly punctured, punctures clearly defined although small, interstices shagreened, an ill-defined chevron-shaped transverse depression behind the anterior border; anterior tibiae strongly ridged, those of the male with a large blunt tooth on the dorsal surface equidistant from each end, femora with a blunt tooth on the ventral surface one third of the way from the distal end. Scutellum cordiform, shagreened, impunctate. Elytra × 2·2 as long as thorax, slightly broader than thorax, basal area little raised, humeri well developed, transverse depression and humeral sulci small and shallow, punctation well-developed within the transverse depression and humeral sulci, reduced on the basal area and vestigial towards the apices, interstices flat. Genitalia, male, Text-fig. 9H.

Lectotype : male, "TIMOR", date unknown "(*W. Doherty*)", in the Bowditch collection of the Museum of Comparative Zoology, Harvard "(Type No. 9818)". By present selection.

Paralectotype : male, "TIMOR", date unknown "(*W. Doherty*)", in the Bowditch collection of the Museum of Comparative Zoology, Harvard. By present selection.

This very distinct species is similar to *D. pinguis*, but it has longer almost parallelsided elytra and a much more rectangular pronotum.

# Deretrichia sulcicollis (Baly) comb. n. (Text-figs. 91, 129)

#### Rhyparida sulcicollis Baly, 1867: 199.

3 Length 3-4 mm. Colour dark brown, appendages slightly lighter. Head shagreened, epicranium opaque and very minutely punctate, a deep epicranial suture extending to a point well behind the level of the back of the eyes, sutures between epicranium and frontoclypeus indistinct, frontoclypeus with sides diverging from back to front, anterior border emarginate, emargination forming one eighth of the circumference of a circle, antennae extending one quarter of the way down the elytra, 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd, 4th longer than 1st, 5th-11th approximately equal and each longer than 1st but shorter than 4th. Thorax (Text-fig. 120)  $1 \cdot 0 \times 1 \cdot 8$  mm., pronotum lightly shagreened, thinly and obscurely punctured, median anterior edge impunctate, sides rounded, lightly margined, converging from one third of the way from the base towards the apex, a deep chevron-shaped,

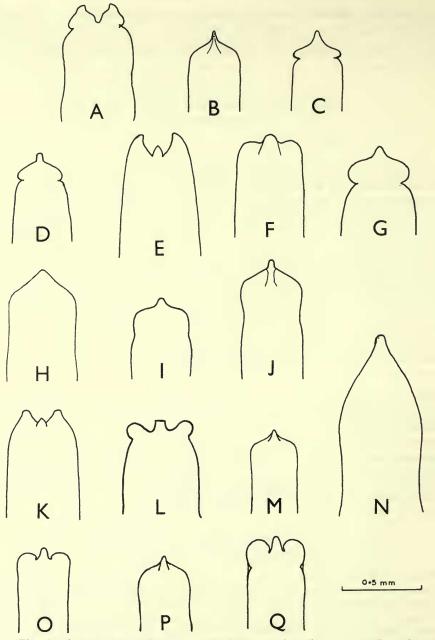


FIG. 9. Tip of aedeagus, dorsal view. A. Deretrichia amboinensis sp. n. B. D. andannensis (Jacoby). c. D. tibialis (Baly). D. D. nigronotata sp. n. E. D. livida sp. n. F. D. ruginotum sp. n. G. D. doryensis sp. n. H. D. timorensis (Jacoby). I. D. sulcicollis (Baly). J. D. batchianica sp. n. K. D. plebeja (Jacoby). L. D. hincksi sp. n. M. D. rothschildi (Jacoby). N. D. alternata (Baly). O. D. australis sp. n. P. D. laevifrons (Jacoby). Q. D. giloloensis sp. n.

transverse depression just behind the anterior edge with the apex pointing posteriorly; femora with a small tooth on the ventral surface one third of the way from the apex, apical half of the prothoracic femora covered with many small teeth, tibiae ridged. *Scutellum* cordiform, glabrous, lightly shagreened. *Elytra*  $\times 2 \cdot I$  as long as thorax, broader than thorax, basal area and humeri strongly raised, transverse groove and humeral sulci very distinct, punctation deep within the transverse groove and humeral sulci, reduced on the basal area and towards the apex, interstices convex on the basal area. Genitalia, male, Text-fig. 91.

Lectotype : male, "SULU ISLANDS", 1860–1861 (C. Allen), from the Baly collection. By present selection.

This species is similar to D. *amboinensis* but is smaller, has a deeper depression on the pronotum, a more raised basal area and much less distinct sutures between the frontoclypeus and the epicranium.

# Deretrichia pinguis sp. n.

(Text-figs. IOM, I3B)

 $\bigcirc$  Length 3.7 mm. Colour brown with dark areas particularly on the pronotum and along the elytral suture. Head shagreened, epicranium minutely and indistinctly punctate, an epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus with shallow indistinct punctures, sides slightly diverging anteriorly, anterior edge emarginate, emargination forming five sixteenths of the circumference of a circle, antennae stout, extending halfway down the elytra, 1st segment equal to 3rd and each of 5th-11th, 2nd shorter, 4th longer than 3rd. Thorax (Text-fig. 13B)  $1.0 \times 1.8$  mm., pronotum glabrous, very lightly shagreened with sparse, small, shallow punctures along the extremities, sides rounded with a broad margin ; tibiae of female ridged, femora with a blunt tooth on the ventral surface one quarter of the way from the apex. Scutellum cordiform with a flat base, very lightly shagreened, impunctate. Elytra  $\times 2.6$ as long as thorax, just broader than thorax, humeri and basal area slightly raised and bounded behind by a shallow, transverse depression, punctures shallow but distinct within the transverse depression, becoming indistinct on the basal area and the apical half, interstices glabrous and smooth with a few minute scattered punctures. Genitalia, female, Text-fig. 10M.

Holotype : female, "PAPUA, Mafulu, 4,000 ft., i.1934 (L. E. Cheesman)". Paratypes : two females, data as above.

This species closely resembles *D. muiri*, but can readily be distinguished by the much reduced punctation of the pronotum, elytra, scutellum and frontoclypeus.

# Deretrichia nigra sp. n. (Text-fig. 12N)

 $\bigcirc$  Length 3.6 mm. Colour dark brown, with head, scutellum and appendages lighter. Head lightly shagreened, epicranium closely but minutely and indistinctly punctate, a short epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus indistinct, frontoclypeus closely but minutely and indistinctly punctate, sides diverging slightly anteriorly, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching over halfway down the elytra, 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd and approximately equal to each of 5th-11th, 4th longer than 1st. Thorax (Text-fig. 12N)  $1.6 \times 0.9$  mm., strongly margined, surface with many small but distinct punctures, interstices glabrous and shagreened ; tibiae of female

lightly ridged, femora with a small blunt tooth on the ventral surface one third of the way from the apex. Scutellum cordiform, impunctate, lightly shagreened. Elytra  $\times 2.7$  as long as thorax, broader than thorax, basal area and humeri strongly raised and bounded on the posterior side by a clearly-defined, transverse depression, humeral sulci deep, punctures large and deep in the transverse groove and humeral sulci, reduced on the basal area, the humerus and the apical half of the elytra, interstices smooth, flat and glabrous, with a few minute punctures. Genitalia missing.

Holotype : female, "GILOLO", i-iii.1858 (A. R. Wallace), from the Baly collection.

This species is the smallest of the dark-coloured species and is characterized by the closely punctate and heavily granulate pronotum. The male is unknown.

# Deretrichia batchianica sp. n.

(Text-figs. 9J, 13B)

& Length 4.2 mm. Colour unicolorous dark flavous. Head heavily shagreened, epicranium impunctate, a shallow well-defined epicranial suture extending to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus ill-defined, frontoclypeus with ill-defined, shallow punctures, sides diverging strongly from posterior to anterior, anterior edge emarginate, emargination forming one third of the circumference of a circle, antennae reaching halfway down the elytra in the male, 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd, 5th-11th approximately equal and each longer than 1st, 4th longer than 5th. Thorax (Text-fig. 13B) 1.1 × 1.9 mm., rounded, strongly margined, surface very lightly shagreened, densely but lightly punctate; femora with a small spine on the ventral surface, mesothoracic tibiae very deeply emarginate, metathoracic tibiae less so, the male prothoracic tibiae with a prominent tooth almost halfway down the dorsal surface, strongly ridged, the ridges spirally arranged on the apical half. Scutellum cordiform, approximately as long as broad, surface impunctate and lightly shagreened. Elytra  $\times 2.5$  as long as and broader than pronotum, glabrous, basal area and humeri little raised, humeral sulcus and transverse depression very shallow, punctures shallow and ill-defined, most developed within the depression, lighter on the basal area and vestigial towards the apex. Genitalia, male, Text-fig. 9J.

Holotype : male, "BATCHIAN ", ix.1858-iv.1859 (A. R. Wallace), from the Baly collection.

This species is similar to *D. brunnea* but is usually smaller, and the pronotum is more finely punctured and more narrowed anteriorly.

#### Deretrichia pallidocaudata sp. n.

(Text-figs. 10N, 13F)

 $\bigcirc$  Length 4.5 mm. Colour dark brown ; head, tibiae, tarsi, proximal half of the femora and apex of the elytra lighter. Head with epicranium shagreened with many large shallow, but very obscure punctures, an epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus shagreened with many large, shallow, obscure punctures, sides strongly diverging, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching halfway down elytra, 1st, 2nd and 3rd segments almost equal, 4th-11th longer than 3rd and subequal. Thorax (Text-fig. 13F)  $2 \cdot 1 \times 1 \cdot 2 - 1 \cdot 9 \times 1 \cdot 1$  mm., pronotum heavily margined, sides smoothly rounded, surface glabrous, very lightly granular, closely punctate, punctures small and shallow but distinct, a very shallow, ill-defined, chevron-shaped depression just behind the anterior border, extending across the surface and least distinct on the middle of the disc ; tibiae of female heavily ridged, meso- and meta-tibiae heavily emarginate, femora with a small blunt spine on the ventral surface one third of the way from the apex. Scutellum cordiform with a

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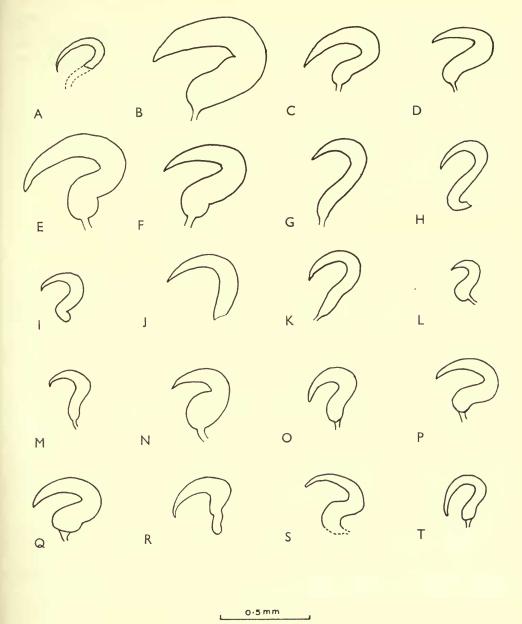


FIG. 10. Spermatheca, lateral view. A. D. minuta sp. n. B. D. morokensis sp. n. C. D. andannensis (Jacoby). D. D. nigronotata sp. n. E. D. livida sp. n. F. D. viridis sp. n. G. D. paumomuensis sp. n. H. D. bipustulata (Baly). I. D. guadalcanalensis sp. n. J. D. ruginotum sp. n. K. D. sordida (Baly). L. D. inornata (Jacoby). M. D. pinguis sp. n. N. D. pallidocaudata sp. n. O. D. approximata (Baly). P. D. intermedia (Baly). Q. D. hincksi sp. n. R. D. rothschildi (Jacoby). S. D. cyclopensis sp. n. T. D. bryanti sp. n.

flat base, shagreened with a few minute and very indistinct punctures. Elytra  $\times 2.6$  as long as thorax, broader than thorax, humeri and basal area strongly raised, humeral sulci and transverse depression deep and distinct, punctures large and distinct within the humeral sulcus and transverse depression, indistinct on the basal area, humeri and posterior half of the elytra. Genitalia, female, Text-fig. ION.

Holotype : female, "CERAM", 1860 (A. R. Wallace), from the Baly collection. Paratype : female, data as above. In the Manchester Museum.

This species is similar to *D. pallida*, but is larger and lighter with the scutellum and elytra of the same colour, and it has a less granular pronotum with a chevron-shaped depression. The holotype bears a Baly label with the annotation "Var. A. Type, near *Rhyparida brunnea*". However no description of this "Variety", was published. The male is unknown.

# Deretrichia approximata (Baly)

(Text-figs. 100, 13c)

Rhyparida approximata Baly, 1867 : 184. Deretrichia approximata (Baly) Weise, 1912 : 425.

Q Length 4.2 mm. Colour very dark brown, almost black, epicranium and legs chestnut brown, head appendages flavous. Head with epicranium heavily shagreened with many small, distinct punctures, a deep epicranial suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus indistinct, frontoclypeus granulate with distinct shallow punctures, sides diverging slightly anteriorly, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching one third of the way down the elytra, 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd, 4th-11th approximately equal and each longer than 1st. Thorax (Text-fig. 13c)  $2\cdot 5 \times 1\cdot 25$ mm., sides margined and converging from one third of the way from the base, surface glabrous and very lightly shagreened with numerous punctures, punctures large and deeply impressed at the sides, shallow along the mid-line ; anterior tibiae of female strongly ribbed, femora with a small blunt tooth on the ventral surface one quarter of the way from the apex. Scutellum broader than long, cordiform with a flat base, shoulders obsolete, shagreened, impunctate. Elytra  $\times 2.7$  as long as thorax, slightly broader than thorax, a broad but shallow transverse depression behind the basilar space, humeri sub-prominent, punctures large and distinct, especially within the transverse depression and humeral sulci, shallow and indistinct towards the apex, interstices smooth and glabrous, just perceptibly convex. Genitalia, female, Text-fig. 100.

Lectotype : female, "MYSOL", 1860 (A. R. Wallace), from the Baly collection. By present selection.

This species and *D. plebeja* are closely related but *D. approximata* has a chestnut brown epicranium and large punctures on the elytra. The male is unknown.

Deretrichia plebeja (Jacoby) (Text-figs. 9K, 11H, 13A)

Rhyparida plebeja Jacoby, 1894 : 281. Deretrichia plebeja (Jacoby) Weise, 1912 : 425. Rhyparida nigrita Bryant, 1949 : 921 (Syn. n.).

 $3^{\circ}$   $\downarrow$  Length 4.0-5.0 mm., male generally shorter than female. Colour very dark brown, almost black, head appendages, claws and clypeus fulvous, segments 1-5 of antennae fulvous, 6-11

dark brown. Head lightly shagreened, epicranium with posterior part lightly punctured, a short deep epicranial suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus deeply punctate, just longer than broad, sides strongly diverging from posterior to anterior, anterior edge emarginate, emargination forming three eighths of the circumference of a circle, antennae reaching halfway down the elytra, and segment short, 1st equal to 3rd and longer than and, 5th-11th approximately equal and each longer than 1st, 4th longer than 5th. Thorax (Text-fig. 13A), female  $2.75 \times 1.6$  mm., male  $2.2 \times 1.25$  mm., pronotum with sides rounded, converging from one third of the way from the base towards the apex, margined, punctures small and well spaced, interstices glabrous and very slightly shagreened; tibiae ridged, those of male with a tooth on the mid-dorsal surface, femora with a minute tooth on the mid-ventral surface. Scutellum cordiform, impunctate, glabrous. Elytra male,  $\times 2.25$  and female  $\times 2.3$  as long as thorax, just wider than thorax, basal area and humeri strongly raised, transverse depression and humeral sulci deep, punctures large and deep within the transverse depression and humeral sulci, reduced on the basal and mid-elytral areas, vestigial at the apices, interstices flat and glabrous. Genitalia, male, Text-fig. 9K ; female Text-fig. 11H.

Lectotype : male, "NEW GUINEA, Humbolt Bay", probable date of collection 1892 " (*W. Doherty*)", from the Jacoby collection. By present selection.

Other material : the male holotype of *Rhyparida nigrita* Bryant, a synonym of *D. plebeja*, and eleven male and seven female paratypes, "NEW GUINEA, Cyclops Mts., 3,500 ft., iii.1936 (*L. E. Cheesman*)", in the British Museum (Nat. Hist.).

This species is very close to *D. approximata* Baly, but may be distinguished from it by the lack of a red epicranium, and the much reduced punctation of the elytra.

# Deretrichia brunnea (Baly) comb. n. (Text-fig. 13G)

#### Rhyparida brunnea Baly, 1867: 196.

& Length 4.8 mm. Colour unicolorous dark brown, femora with diffuse black bands before the apices. Head shagreened, epicranium closely but very distinctly punctate, epicranial suture extending to a point behind the level of the eyes, sutures between epicranium and frontoclypeus distinct but not deep, frontoclypeus about as long as broad, punctures small and shallow but distinct, sides diverging anteriorly, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching one third of the way down the elytra, and segment short, and longer than and, 1st longer than and, 4th longer than 1st, 5th-11th approximately equal and each longer than 4th. Thorax (Text-fig. 13G)  $2 \cdot 2 \times 1 \cdot 4$  mm., pronotum strongly convex longitudinally and transversely margined, very distinctly punctured with small, round, closely-packed punctures, interstices shiny and very slightly shagreened, especially along the anterior margin, just behind the anterior border a deep, but ill-defined chevronshaped depression extending across the disc but least distinct in the middle; femora with a very small tooth on the ventral surface one third of the way from the apices, anterior tibiae of male enlarged and heavily ridged with a conspicuous tooth on the dorsal surface, other tibiae ridged. Scutellum cordiform with a flat base and extended shoulders, longer than broad, lightly shagreened, impunctate. Elytra  $\times 2.33$  as long as thorax, just wider than thorax, basal area and humeri strongly raised and bounded behind by a shallow but distinct transverse depression, strongly sulcate within the humeral calli, strongly punctured within the transverse depression and humeral sulci, punctures less strongly impressed on the basal area and almost obsolete near the apices, interstices flat. Genitalia damaged.

Lectotype : male, "BATCHIAN", ix.1858-iv.1859 (A. R. Wallace), from the Baly collection. By present selection. The tip of the aedeagus has been broken off in the lectotype.

This species shows some similarities to *D. plebeja* but is brown and has a much more finely punctured pronotum which is less narrowed anteriorly. The female is unknown.

# Deretrichia intermedia (Baly)\* (Text-figs. 10P, 13E)

Rhyparida intermedia Baly, 1867 : 188. Deretrichia intermedia (Baly) Weise, 1912 : 425.

♀ Length 5.5 mm. Colour chestnut brown, basal five segments of antennae, other head appendages and the mid-portion of the femora lighter. Head lightly shagreened, epicranium with shallow, very indistinct punctures, an epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus distinct, frontoclypeus approximately as wide as long and boldly punctured, sides approximately parallel, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching halfway down the elytra, 2nd segment short, 1st longer than 2nd and equal to 3rd, 4th and 5th equal but longer than 3rd, 6th-11th approximately equal and each intermediate in length between 3rd and 4th. Thorax (Text-fig.  $I_{3E}$ ) almost  $\times 2$  as broad as long, sides strongly margined and converging from one third of the way from the base towards the apex, mid-anterior edge slightly raised and projecting forward to form a small hood over the head, surface smooth and glabrous with numerous small, shallow, distinct punctures, slightly but distinctly elongated longitudinally; tibiae strongly ridged, prothoracic femora with a large blunt tooth on the ventral surface one third of the way from the apices, tooth much reduced on the meso- and meta-thoracic legs. Scutellum cordiform with a flat base, very lightly granulate, impunctate. Elytra  $\times 2.43$  as long as thorax, just wider than thorax, basal area and humeri slightly raised and bounded behind by a very shallow but distinct transverse depression, punctures large and very distinct, less so on the basal area, the humeri and towards the apices. Genitalia, female, Text-fig. 10P.

A specimen has been determined from the original description. It was collected from the type locality, "WAIGIOU", vi-viii.1860 (A. R. Wallace), and is almost certainly a syntype. It is this specimen that has been redescribed here and is now in the British Museum (Nat. Hist.).

This species is similar to *D. hincksi* but the pronotum is strongly narrowed towards the base (Text-fig. 13E). The male is unknown.

# Deretrichia rothschildi (Jacoby) comb. n. (Text-figs. 9M, IOR, I3T)

# Rhyparida rothschildi, Jacoby, 1894: 277.

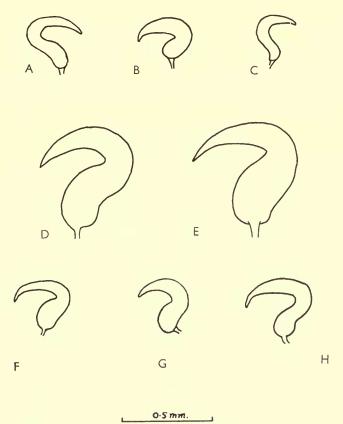


FIG. II. Spermatheca, lateral view. A. Deretrichia frontalis (Baly). B. D. wallacei sp. n.
C. D. separata (Baly). D. D. alternata (Baly). E. D. flebilis sp. n. F. D. tibialis (Baly).
G. D. semipunctata (Baly). H. D. plebeja (Jacoby).

5th. Thorax (Text-fig. 13T)  $1.4 \times 0.9$  mm., sides very strongly curved, surface strongly shagreened with numerous shallow, very elongated punctures, an ill-defined, chevron-shaped, transverse depression behind the anterior border ; anterior tibiae strongly ridged, no blunt tooth on the dorsal surface of the male tibia, femora with a very small blunt tooth one third of the way from the apex on the ventral surface in both sexes (the original description by Jacoby stated that the femora were unarmed). Scutellum cordiform with a flat base, broader than long, shagreened, impunctate. Elytra  $\times 2.43$  as long as the thorax, slightly broader than thorax, transverse depression and humeral sulci well-defined, basal area and humeri prominently raised, punctures distinct, especially within the transverse depression and humeral sulci, shallower and less distinct towards the apices, interstices obsoletely convex. Genitalia, male, Text-fig. 9M ; female, Text-fig. 10R.

Lectotype : male, "HALMAHEIRA (Gilolo), 1892 (*W. Doherty*)", from the Bowditch collection in the Museum of Comparative Zoology, Harvard " (Type No. 9816)", the left hand specimen of two males mounted on the same card. By present selection.

Paralectotype : male, data as above. Mounted on the same card as the lectotype. By present selection.

Paralectotype : female, data as above, but mounted on a separate card. By present selection.

This species is similar to *D. cyclopensis* but it is shorter and has sparse and very elongated pronotal punctures.

# Deretrichia australis sp. n.

(Text-figs. 90, 130)

 $\delta$  Length 3.8 mm. Colour unicolorous light brown. Head shagreened, epicranium with longitudinal rugosities at the base, impunctate, a shallow epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus distinct, frontoclypeus with a few small punctures on the anterior portion, sides diverging from posterior to anterior, anterior edge emarginate, emargination forming one third of the circumference of a circle, antennae missing. Thorax (Text-fig. 132)  $1 \cdot 1 \times 1.9$  mm, highly convex, margin narrow, sides very strongly curved, surface glabrous, very lightly shagreened, punctures evenly but thinly distributed, very small and shallow yet distinct, slightly elongated longitudinally; femora with a small blunt tooth on the ventral surface one third of the way from the apex, tibiae ridged with a suggestion of a tooth on the dorsal surface in the male only. Scutellum cordiform with a flat base, shagreened with a few indistinct, small punctures on the anterior half. Elytra  $\times 2.1$  as long as thorax, broader than thorax, basal area and humeri slightly raised, bounded behind by a shallow, transverse depression, punctures small, but distinct, most obvious in the depression and humeral sulci, less so on the basal area and towards the apex, interstices glabrous and smooth. Genitalia, male, Text-fig 90.

Holotype : male, "QUEENSLAND, Cairns, 21.1.1908", collector unknown.

This species and D. minuta sp. n. are the first species of Deretrichia described from Australia. D. australis may be distinguished from the D. minuta by the lighter colour, more convex pronotum and the slightly elongated pronotal punctures.

# Deretrichia cyclopensis sp. n.

(Text-figs. 10S, 13N)

 $\bigcirc$  Length 3·1 mm. Colour dark brown with very dark brown patches, appendages light brown. Head shagreened, epicranium with minute, shallow, indistinct punctures, a deep epicranial suture extending back to a point just behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus with small, shallow but distinct punctures, sides diverging anteriorly, anterior edge emarginate, emargination forming one sixth of the circumference of a circle, antennae reaching almost halfway down the elytra, the 6 distal segments stout, 1st and 3rd-11th segments approximately equal in length, 2nd shorter. Thorax (Text-fig. 13N) 1·9 × 1·0 mm., glabrous, very lightly shagreened with many shallow but distinct punctures, slightly elongated in a longitudinal direction, margin narrow; femora with a small blunt tooth on the ventral surface one third of the way from the apex. Scutellum cordiform with a flat base, shagreened, impunctate. Elytra × 2·1 as long as thorax, broader than thorax, basal area and humeri raised, bounded behind by a transverse depression, punctures large and distinct within the humeral sulci and transverse depression, much reduced on the basal area, vestigial towards the apices, interstices smooth and glabrous. Genitalia, female, Text-fig. 10S. Holotype : female, "DUTCH NEW GUINEA, Cyclops Mts., Mt. Lina 3,500 ft., iii.1936 (L. E. Cheesman)".

This species is similar to *D. pinguis* but may be distinguished by the frontoclypeus with its strongly diverging sides. It is also broader with a larger, slightly more raised basal area and a more sparsely and lightly punctured thorax.

# Deretrichia bryanti sp. n.

(Text-figs. 10T, 131)

♀ Length 4.25 mm. Colour dark brown, head appendages, scutellum and median and anterior margins of the elytra lighter. *Head* shagreened, epicranium closely but obscurely punctured, an epicranial suture extending to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus indistinct, frontoclypeus scarcely longer than broad, sides approximately parallel, anterior border emarginate, emargination forming one fifth of the circumference of a circle, surface distinctly and evenly punctured, antennae extending to one third of the way down the elytra, and segment short, and longer than and, ist longer than ard, 4th longer than 1st, 5th equal to 6th and longer than 1st but shorter than 4th, 7th-11th missing. Thorax (Text-fig. 131)  $2 \cdot 0 \times 3 \cdot 1$  mm., pronotum with sides evenly rounded, border narrow, surface closely and deeply punctured, punctures very slightly elongate, interstices lightly shagreened particularly along the anterior margin; femora with a minute tooth on the ventral surface one third of the way from the apices, tibiae ridged in female. Scutellum as broad as long, semi-ovate, very lightly shagreened, impunctate. Elytra  $\times 2.7$  as long as thorax, slightly broader than thorax, basal area and humeri slightly raised, transverse depression and humeral sulci distinct, deeply punctured, punctures less strongly impressed although distinct towards the apex, interstices flat and smooth. Genitalia, female, Text-fig. 10T.

Holotype : female, "GILOLO", i-iv.1858 (A. R. Wallace), from the Jacoby collection.

This species is near *D. frontalis*, but it is smaller and lighter and the pronotum is smoother in outline and more heavily punctured. The male is unknown.

# Deretrichia frontalis (Baly)

(Text-figs. IIA, I3J)

*Rhyparida frontalis* Baly, 1867 : 181. *Deretrichia frontalis* (Baly) Weise, 425.

 $\[mathbb{Q}\]$  Length 4.5 mm. Colour very dark brown, appearing black ; head, scutellum, appendages and abdomen light brown. Head epicranium shagreened with shallow, indistinct punctures, an epicranial suture extending back to a point just posterior to the level of the back of the eyes, suture between epicranium and frontoclypeus indistinct, frontoclypeus with shallow punctures, denser on the posterior half than on the anterior half, interstices very lightly granulate, as long as broad, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae extending one third of the way down the elytra, 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd, 4th longer than 1st, 5th-11th each equal to 1st. Thorax (Text-fig. 13J)  $2\cdot3 \times 1\cdot25$  mm., sides rounded, converging from one third of the way from the base towards the apex, strongly margined, surface distinctly and very closely punctured at the sides and on the disc, punctures slightly elongated, interstices glabrous and very lightly shagreened ; femora with a minute tooth on the ventral surface one third of the way from the apex, anterior tibia of female very ribbed. Scutellum broader than long, cordiform with a flat base, shagreened, impunctate. Elytra  $\times 2\cdot5$  as long as thorax, just broader than thorax,

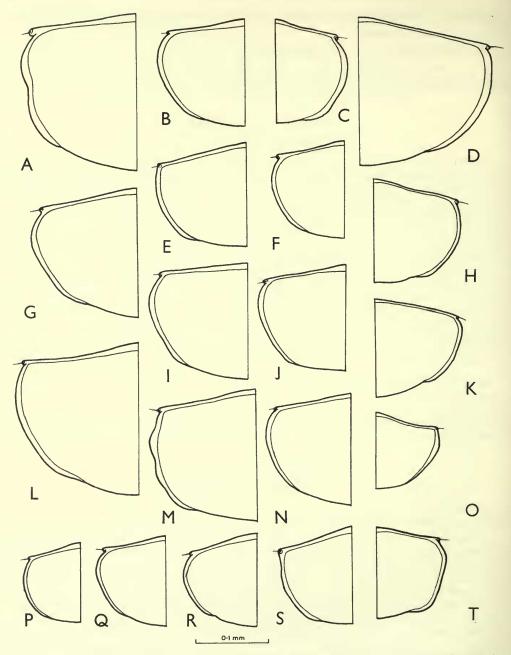


FIG. 12. Pronotum, dorsal view. A. Deretrichia morokensis sp. n. B. D. tibialis (Baly).
c. D. amboinensis sp. n. D. D. laticollis (Baly). E. D. paumomuensis sp. n. F. D. andannensis (Jacoby). G. D. livida sp. n. H. D. sordida (Baly). I. D. nigronotata sp. n. J. D. ruginotum sp. n. K. D. papuensis sp. n. L. D. doryensis sp. n. M. D. viridis sp. n. N. D. nigra sp. n. O. D. guadalcanalensis sp. n. P. D. minuta sp. n. Q. D. sulcicollis (Baly). R. D. inornata (Jacoby). S. D. bipustulata (Baly). T. D. timorensis (Jacoby).

excavated below the basilar space, striae strongly and deeply punctured within the transverse depression and humeral sulci, slightly reduced on the basal area and vestigial at the apices, interstices obsoletely convex on the anterior half, flat posteriorly. Genitalia, female, Text-fig. IIA.

Lectotype : female, "DOREY", New Guinea, iv-vi.1858 (A. R. Wallace), from the Baly collection. By present selection.

This species is similar to *D. bryanti*, but is lighter and has a narrower scutellum. The male is unknown.

# Deretrichia hincksi sp. n.

(Text-figs. 9L, 10Q, 13D)

 $3^{\circ}$  Q Length 5.5-6.4 mm. Colour reddish brown, with appendages and apex of elytra lighter ; many specimens much darker, some almost black, with a reddish-brown area on the anterior half of the epicranium, light brown appendages and no pale apices to the elytra. *Head* lightly shagreened, epicranium with numerous shallow, indistinct punctures, an epicranial suture extending back to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus approximately as wide as long, closely and boldly punctured, sides slightly diverging from base to apex, anterior edge emarginate, emargination forming one third of the circumference of a circle, antennae extending halfway down elytra, and segment short, 1st equal to 3rd and longer than and, 4th and 5th equal and each longer than 3rd, 6th-11th approximately equal and each intermediate in length between 3rd and 4th. Thorax (Text-fig. 13D) pronotum  $1.8 \times 3.25$  mm., sides strongly margined and smoothly rounded, mid-anterior edge slightly raised and projecting forward to form a small hood over the head, surface glabrous, minutely shagreened, with numerous small, evenlydistributed, distinct punctures; tibiae strongly ridged, male with a large blunt tooth on the dorsal side just proximal to the mid-point of the pro-thoracic tibiae, femora with a minute tooth on the ventral surface near the mid-point. Scutellum cordiform with a flat base, much broader than long, glabrous with a few minute punctures. Elytra  $\times 2.75$  as long as thorax, just wider than thorax, basal area and humeri slightly raised and bounded below by a very shallow, indistinct transverse groove, punctures large and very distinct, less so on the basal area and humeri and towards the apices. Genitalia, male, Text-fig. 9L; female Text-fig. 102.

Holotype : male, "N.W. NEW GUINEA, Manokwari, Amban Zool. Res., 24.iii.1961 (J. Schreurs), on cacao leaves ".

Paratypes : three males and four females, data as above. Of the paratypes one male and one female are in the Dept. of Agriculture, Dutch New Guinea.

This species is very variable in colour and size. It most resembles *D. plebeja*, but is lighter and larger and the epipleura are much broader at the base and more evenly tapered. The sides of the pronotum are more evenly curved, the elytral humerus is smaller and the punctation of the pronotum and frontoclypeus is bolder.

# Deretrichia wallacei sp. n.

(Text-figs. 11B, 13H)

Q Length 4.5 mm. Colour dark brown; head, appendages, scutellum, posterior part of abdomen, extreme posterior and extreme anterior parts of elytra lighter. Head granular, epicranium indistinctly shagreened, an epicranial suture extending back to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus distinct, frontoclypeus scarcely broader than long, very indistinctly punctured, sides approximately parallel, anterior

edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching one third of the way down the elytra, 2nd segment short, 3rd longer than 2nd, 1st longer than 3rd, 4th and 5th equal and longer than 1st, 6th-11th approximately equal and each longer than 4th. Thorax (Text-fig. 13H)  $2 \cdot 2 \times 1 \cdot 15$  mm., pronotum shagreened, almost twice as broad as long, sides slightly angular, border narrow, surface very closely and deeply punctate, punctures very slightly elongate ; femora with a minute tooth one third of the way from the distal end, tibiae ridged. Scutellum cordiform with a flat base, shagreened, impunctate. Elytra  $\times 2.95$  as long as thorax, just wider than thorax, basal area and humeri distinctly raised, transverse depression and humeral sulci distinct, punctures deep and distinct over the anterior half of the elytra, especially within the transverse groove and humeral sulci, reduced on the posterior half and vestigial towards the apices, interstices raised. Genitalia, female, Text-fig. 11B.

Holotype : female, "MYSOL", 1860 (A. R. Wallace).

This species is similar to *D. bryanti*, but darker. The pronotum is more heavily punctured and the basal area and humeri of the elytra are more raised. The sutures between the epicranium and the frontoclypeus are more distinct. The punctures on the frontoclypeus are larger but sparser. The spermatheca is stouter with a hooked proximal end and bulbous base (Text-fig. 11B).

# Deretrichia laevifrons (Jacoby) comb. n.\* (Text-figs. 9P, 13K)

Rhyparida laevifrons Jacoby, 1884 : 201.

d Length 4.0 mm. Colour fulvous, thorax darker. Head heavily shagreened, epicranium impunctate, an epicranial suture extending to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus indistinct, frontoclypeus with a few minute and very indistinct punctures, sides slightly diverging anteriorly, anterior edge emarginate, emargination forming one quarter of the circumference of a circle, antennae extending halfway down the elytra, and segment short, and longer than and, ist longer than ard, 4th-11th approximately equal and each longer than 1st. Thorax (Text-fig. 13 $\kappa$ ) 1·1 × 2·0 mm., sides smoothly rounded with a broad margin, punctures small and numerous, very distinct and slightly elongate, interstices shagreened, a shallow, ill-defined, chevron-shaped, transverse depression just behind the anterior border, with the apex pointing posteriorly; femora with a minute tooth on the ventral surface one third of the way from the apex, tibiae ridged in male, with a small tooth on the ventral surface. Scutellum cordiform with a flat base, surface shagreened, impunctate. *Elytra*  $\times 2.3$  as long as thorax, just wider than thorax, basal area and humeri strongly raised, transverse groove prominent, punctures deep, especially within the transverse groove and humeral sulci, reduced on the basal area and on the apical half, becoming vestigial at the apices. Genitalia, male, Text-fig. 9P.

Syntypes : NEW GUINEA, 1872 (L. M. Albertis), probably in the Genoa Museum. A syntype : male, "NEW GUINEA, Sorong, 1872 (L. M. Albertis)", in the Paris Museum.

This species is similar to D. giloloensis but the elytra are more lightly punctured and the basal area is more raised. The pronotum has no depression and is much less heavily punctured. The frontoclypeus is also much less heavily punctured. The female is unknown.

# Deretrichia giloloensis sp. n. (Text-figs. 90, 13R)

& Length  $4\cdot 2-4\cdot 6$  mm. Colour unicolorous fulvous. Head shagreened with many shallow yet distinct punctures, an epicranial suture extending to a point behind the level of the back of the eyes, sutures between epicranium and frontoclypeus very distinct, frontoclypeus heavily punctate, sides diverging slightly from posterior to anterior, anterior edge emarginate, emargination forming one third of the circumference of a circle, antennae reaching halfway down the elytra, and segment short, 3rd longer than 2nd, 1st longer than 3rd, 4th-11th approximately equal and each longer than 1st. Thorax (Text-fig. 13B)  $1\cdot 4 \times 2\cdot 2$  mm., sides evenly rounded and thinly margined, heavily punctate, punctures slightly elongated, interstices shagreened, femora with a small blunt tooth on the ventral surface halfway between base and apex, tibiae ridged, with a large blunt tooth on the dorsal surface one third of the way from base to apex. Scutellum cordiform, with a flat base, lightly shagreened, impunctate. Elytra  $\times 2\cdot I$  as long as thorax, basal area and humeri little raised, transverse depression and humeral sulci shallow, punctation deep and only slightly reduced on the basal areas and apical halves, except at the apex where it is vestigial, interstices very slightly convex. Genitalia, male, Text-fig. 9g.

Holotype : male, "GILOLO", i-iv.1858 (A. R. Wallace). Paratype : male, data as above.

This species closely resembles *D. laevifrons* (from the mainland of New Guinea) but the basal area of the elytra is much more heavily punctured and there is no chevron-shaped depression just behind the anterior edge of the pronotum.

# Deretrichia alternata (Baly) comb. n.

(Text-figs. 9N, 11D, 13L)

#### Rhyparida alternata Baly, 1864 : 9. Rhyparida alternata Baly, 1867 : 166.

 $3^{\circ}$  Q Length 6.25–7.25 mm. Colour chestnut brown, elytra and mandibles very dark brown, almost black, antennal segments 4-7 dark brown, segments 8-11, labial and maxillary palps flavous. *Head* shagreened, epicranium with a few minute and obscure punctures, a shallow, well-defined epicranial suture extending to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus distinct, frontoclypeus approximately as broad as long, sides diverging slightly anteriorly, anterior edge emarginate, emargination forming one sixth of the circumference of a circle, surface shagreened with numerous well-defined, shallow, evenlyspaced punctures, antennae extending two thirds of the way down the elytra of the male, and halfway down the elytra of the female, and segment short, ist equal to and but longer than 2nd, 4th-11th approximately equal and each longer than 1st. Thorax (Text-fig. 13L) female,  $3.1 \times 2.0$  mm., male,  $2.75 \times 1.9$  mm., pronotum strongly margined, sides rounded, converging from one third of the way from the base to the apex, surface lightly shagreened, finely and deeply punctate, punctures along the anterior margin almost obsolete, a shallow ill-defined, chevron-shaped, transverse depression extending across the disc just posterior to the anterior edge; legs, femora with a small spine on the ventral surface, mid- and posterior tibiae very deeply emarginate, no difference in legs between sexes. Scutellum as broad as long, cordiform with a flat base and extended shoulders, lightly granulate, impunctate. Elytra female,  $\times 2.6$ , male,  $\times 2.3$ , as broad as thorax, basal area and humeri strongly raised and bounded behind by a transverse depression, humeral sulci deep, punctures large and deep within the transverse depression, lighter on the basilar area, and very indistinct towards the avices. Genitalia male Text-fig. 9N ; female, Text-fig. 11D.

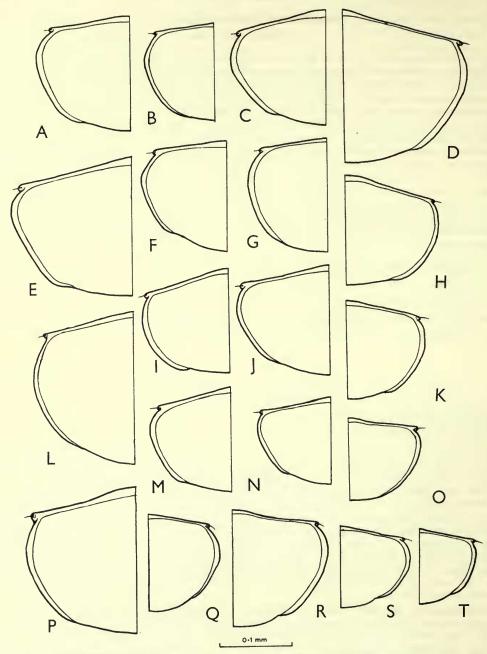


FIG. 13. Pronotum, dorsal view. A. Deretrichia plebeja (Jacoby). B. D. batchianica sp. n. C. D. approximata (Baly). D. D. hincksi sp. n. E. D. intermedia (Baly). F. D. pallidocaudata sp. n. G. D. brunnea (Baly). H. D. wallacei sp. n. I. D. bryanti sp. n. J. D. frontalis (Baly). K. D. laevifrons (Jacoby). L. D. alternata (Baly). M. D. semi-punctata (Baly). N. D. cyclopensis sp. n. O. D. separata (Baly). P. D. flebilis sp. n. Q. D. australis sp. n. R. D. giloloensis sp. n. S. D. pinguis sp. n. T. D. rothschildi (Jacoby).

Lectotype : male, "GILOLO", i-iv.1858 (A. R. Wallace), from the Baly collection. By present selection.

Paralectotype : female, "GILOLO", i-iv.1858 (A. R. Wallace), from the Baly collection. By present selection.

Other material : male, "GILOLO", date and collector unknown, from the Pascoe collection ; female, "GILOLO", i-iv.1858, or "BATCHIAN", ix.1858-iv.1859 (specimen bears a label with both localities), (A. R. Wallace), both specimens in the British Museum (Nat. Hist.). Also female, "HALMAHEIRA", (Gilolo), date and collector unknown, in the Manchester Museum.

This species is very similar to D. *flebilis*, but is more heavily punctured. The frontoclypeus has only slightly diverging sides, the eye is markedly emarginate and the head, pronotum and appendages are chestnut brown.

#### Deretrichia flebilis sp. n.

(Text-figs. IIE, I3P)

♀ Length 6.0-6.5 mm. Colour flavous, elytra and mandibles dark brown, antennal segments 4-9 brown, 10-11 missing. Head shagreened, epicranium with a few very minute and obscure punctures, a shallow, well defined epicranial suture extending to a point well behind the level of the back of the eyes, frontoclypeus approximately as long as broad, sides strongly diverging from back to front, the suture between the epicranium and frontoclypeus distinct but not prominent, anterior border emarginate, emargination forming one sixth of the circumference of a circle, surface very lightly granulate with shallow, obscure punctures, antennae slender, extending two thirds of the way down the elytra, 2nd segment short, 1st equal to 3rd and longer than 2nd, 4th-11th approximately equal and each longer than 1st. Thorax (Text-fig. 13P), female 2.8×1.75 mm., strongly emarginate, sides rounded, converging from one third of the way from the base towards the apex, surface glabrous, finely shallowly but distinctly punctured, punctures along anterior edge almost obsolete; femora with a small spine on the ventral surface, meso- and meta-thoracic tibiae very deeply emarginate, edge of emargination covered with stout setae. Scutellum as long as broad, cordiform with slightly extended shoulders, lightly shagreened, impunctate. Elytra broader than pronotum, basal area and humeri strongly raised and bounded behind by a deep transverse depression, longitudinally sulcate within the humeral calli, punctures large and deep within the transverse depression and on the median portion of the elytra, lighter on the basal area and towards the apices. Genitalia, female, Text-fig. IIE.

Holotype : female, "TERNATE", i-iv.1858 (A. R. Wallace) ex Jacoby collection. Paratype : female, "MOLUCCA ISLANDS", date and collector unknown, in the Paris Museum ex. Lefèvre collection.

The holotype of D. flebilis has a Baly determination label with the name Rhyparida nigripennis Baly. I have not seen a syntype of R. nigripennis. However, the specimen does not fit Baly's original description which is definitely a species of Rhyparida. Therefore I consider it to be reasonable to presume that the specimen in the British Museum is of a different species to Baly's and to describe it as new.

This species is very close to *D. alternata*, but the pronotum is less heavily punctured and the sides of the frontoclypeus are strongly diverging. The thorax and head are light-coloured, the emargination of the eye is much reduced and the points of the triangular-shaped detached lateral arms of the prosternum are much more elongated.

# Deretrichia separata (Baly) comb. n. (Text-figs. 11C, 13 0)

#### Rhyparida separata Baly 1867 : 191.

Q Length 3.8 mm. Colour rufo-fulvous, elytra, meso- and meta-thoracic sternites and abdomen black or almost black, apex of elytra tinged with rufo-fulvous, femora with diffuse black bands on the distal half, mandibles and distal 6 segments of antennae fulvous. Head shagreened, epicranium lightly, minutely and very obscurely punctate, an epicranial suture extending to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus distinct but shallow, frontoclypeus approximately as long as broad, with scattered, indistinct, shallow punctures, sides diverging slightly, anterior edge emarginate, emargination forming one sixth circumference of a circle, antennae reaching one third of the way down the elytra, 3rd segment short, 2nd longer than 3rd, 1st longer than 2nd, 4th longer than 1st, 5th-11th approximately equal and each longer than 1st but shorter than 4th. Thorax (Text-fig. 130)  $1.0 \times 1.8$  mm., pronotum with sides evenly rounded, strongly margined, surface distinctly and closely punctate, less so along the margins, interstices shagreened, a shallow, indistinct, chevron-shaped transverse depression just behind the anterior border ; tibiae very lightly ridged, femora with a small blunt tooth on the ventral surface one third of the way from the apex. Scutellum cordiform with a flat base, 0.3 mm. broad, 0.25 mm. long, lightly shagreened, impunctate. Elytra  $\times 2.6$  as long as thorax, wider than thorax, each basal area and humerus strongly raised and bounded by a very distinct transverse depression and humeral sulcus, slightly reduced on the basal area, strongly reduced on the posterior half of the elytra, vestigial at the apex, interstices flat and glabrous. Genitalia, female, Text-fig. 11c.

Lectotype : female, "BATCHIAN ", ix.1858-iv.1859 (A. R. Wallace). By present selection.

This species is very close to *D. semipunctata*, but smaller and the basal area is slightly less raised with deeper punctures. Within the transverse groove the punctures are more spaced out. The legs are unicolorous and the spermatheca is much slimmer (Text-fig. IIC).

# Deretrichia semipunctata (Baly) comb. n. (Text-figs. 11G, 13M)

#### (ICAT-1155. 110, 13

# Rhyparida semipunctatata Baly, 1867 : 169.

Q Length 4.25 mm. Colour rufo-fulvous, elytra, meso- and meta-thoracic sternites and abdomen black or almost black, apices of elytra tinged rufo-fulvous, mandibles and antennal segments 1-5 black, segments 6-11 dark brown to black, other head appendages flavous. Head shagreened, epicranium lightly, minutely and very obscurely punctured, an epicranial suture extending to a point on a level with the back of the eyes, sutures between epicranium and frontoclypeus distinct but shallow, frontoclypeus about as long as broad with scattered, indistinct, shallow punctures, sides diverging anteriorly, anterior edge emarginate, emargination forming one fifth of the circumference of a circle, antennae reaching one third of the way down the elytra, 2nd segment short, 1st equal to 3rd and longer than 2nd, 4th longer than 1st, 5th-11th approximately equal and each longer than 1st but shorter than 4th. Thorax (Text-fig. 13M) 2.0 × 1.25 mm., pronotum with sides strongly margined and rounded, converging from one third of the way from the base towards the apex, surface distinctly and closely punctured, less so along the margins, interstices shagreened, a shallow, indistinct, chevron-shaped, transverse depression just behind the anterior border and extending across the disc; femora with a blunt tooth on the mid-ventral surface, tibiae ridged. Scutellum cordiform with a flat base, 0.35 mm. broad, 0.3 mm. long, lightly shagreened, impunctate. Elytra  $\times 2.3$  as long as thorax, broader than thorax, basal area and humeri strongly raised and bounded behind by a transverse depression, deeply sulcate within the humeral calli, punctation deep and large within the transverse depression and humeral sulci, reduced on the basal area and posterior half of the elytra, vestigial at the apex, interstices flat and glabrous. Genitalia, female, Text-fig. 11G.

Lectotype : female, "BATCHIAN", ix.1858–iv.1859 (A. R. Wallace), from the Baly collection. By present selection.

This species closely resembles *D. separata*, but is larger, the basal area is more raised and the sides of the pronotum are less evenly rounded. The punctures within the transverse depression of the elytra are much closer together so that adjacent ones appear to be almost confluent. The legs are unicolorous and the spermatheca is stouter (Text-fig. IIG).

## Deretrichia variabilis (Baly)\*

Rhyparida variabilis Baly, 1867 : 182. Deretrichia variabilis (Baly) Weise, 1912 : 182.

This is the only species of *Deretrichia* of which the author has been unable to obtain specimens. It is therefore omitted from the key. From Baly's description it should clearly be included in the genus *Deretrichia*. Three colour varieties were included in his description. *D. variabilis* is broader and more finely punctured than *D. frontalis* and the elytra are more strongly excavated behind the basilar area (Baly 1867). As the original description was included by Baly (1867) in his "Phytophaga Malayana", it is almost certain that the syntype series was collected NEW GUINEA, Dory, iv-vi.1858 (A. R. Wallace).

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